



ENVIRONMENTAL ASSESSMENT BOARD

VOLUME: 262

DATE: Monday, November 19, 1990

BEFORE:

A. KOVEN Chairman

E. MARTEL Member



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HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL
RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR
TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental
Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental
Assessment for Timber Management on Crown
Lands in Ontario;

- and -

IN THE MATTER OF a Notice by the
Honourable Jim Bradley, Minister of the
Environment, requiring the Environmental
Assessment Board to hold a hearing with
respect to a Class Environmental
Assessment (No. NR-AA-30) of an
undertaking by the Ministry of Natural
Resources for the activity of timber
management on Crown Lands in Ontario.

Hearing held at the offices of the Ontario
Highway Transport Commission, Britannica
Building, 151 Bloor Street West, 10th Floor,
Toronto, Ontario, on Monday, November
19th, 1990, commencing at 9:00 a.m.

VOLUME 262

BEFORE:

MRS. ANNE KOVEN
MR. ELIE MARTEL

Chairman
Member



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I N D E X O F P R O C E E D I N G S

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I N D E X O F E X H I B I T S

<u>Exhibit No.</u>	<u>Description</u>	<u>Page No.</u>
1574	Six-page article entitled Woodlot Wizardry taken from the Herald Smith magazine dated January and February 1989, submitted by Mr. Yzerdraat.	47227
1575	Photocopies of five photographs binder.	47264
1575A	Photograph of a jack pine plantation on the Lake Nipigon Forest Domtar FMA on a bedrock.	47247
1575B	Photograph taken on the Lake Nipigon FMA in Vincent Township off Road 284, dated October 1990.	47250
1575C	Photograph looking westward over Davidson Lake to Ombsbika Bay on Lake Nipigon reflecting areas harvested in the late 1930's and late 1940's that were allowed to come back to natural black spruce regeneration.	47267
1575D	Photograph depicting a deep sphagnum peat site on the Spruce River Forest.	47270
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<u>Exhibit No.</u>	<u>Description</u>	<u>Page No.</u>
1576	Duplicate copy of Exhibit 1536 showing in a blue circle the composition of the Lake Nipigon watershed according and showing in red the composition of the Lake Nipigon area according to the Beardmore Watchdog Society.	47257
1577	MNR Interrogatory No.18 and answer thereto (FFT Panel 3).	47258
1578	One-page extract from the Nipigon District Land Use Guidelines, page 54.	47284
1579	Letter dated October 18,1989 from the then district manager of the Nipigon District, Mr Currie, confirming that the proposed amount to amendment to zone 10 was rejected.	47294
1580	Extract from the Domtar/Armstrong Management Unit Timber Management Plan which sets out amendments made during the period April 1, 1985 to March 31, 1990.	47301
1581	Extract from the Lake Nipigon FMA Timber Management Plan which sets out amendments to the plan.	47306
1582	Document dated August 25, 1988 re amendments for the purpose of implementing moose management guidelines in timber harvesting operations.	47308

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<u>Exhibit No.</u>	<u>Description</u>	<u>Page No.</u>
1583	Letter from Quentin Day, acting District Manager for Nipigon dated October 19, 1990 addressed to the President of the Beardmore-Lake Nipigon Society together with a letter dated November 13, 1990 from Mr. Day, President of the Beardmore-Lake Nipigon Watchdog Society.	47310
1584	MOE interrogatory question Nos. 1-12 (Panel 3) and questions 1-5 in relation to the Beardmore-Lake Nipigon Watchdog Society.	47321

1 ---Upon commencing at 10:45 a.m.

2 MADAM CHAIR: Good morning. Please be
3 seated.

4 Ms. Cronk

5 MS. CRONK: Good morning, Madam Chair,
6 Mr. Martel. Mr. Marek, good morning.

7 GEORGE MAREK, Resumed

8 MADAM CHAIR: Ms. Cronk, before you get
9 started there was something we received in the mail
10 that should be made an exhibit.

11 If you recall when we were at the
12 satellite hearing in Geraldton, a Mr. Walter Yzerdraat
13 spoke to the Board and was discussing an issue having
14 to do with an article in a magazine, and he has since
15 sent that article on us and it is called Woodlot
16 Wizardry and it was the Herald Smith magazine in
17 January and February of 1989 and we thank Mr. Yzerdraat
18 for sending that along. The Board has read it and we
19 will make it an exhibit.

20 That will be Exhibit No. 1574. That
21 article is six pages long.

22 Ms. Cronk.

23 ---EXHIBIT NO. 1574: Six-page article entitled Woodlot
24 Wizardry taken from the Herald
25 Smith magazine dated January and
February 1989, submitted by Mr.
Yzerdraat.

1 MS. CRONK: Thank you, Madam Chair.

2 While we are on housekeeping matters, over the weekend
3 we had, as I indicated we would, photocopies made of
4 Exhibit 1567A for the parties and I would like to
5 provide two copies to the Board. You were provided
6 with one copy only last Thursday and--

7 MADAM CHAIR: Oh yes.

8 MS. CRONK: --that's just for record
9 purposes.

10 MADAM CHAIR: The map with the jack pine
11 stands?

12 MS. CRONK: Yes.

13 MADAM CHAIR: Thank you.

14 CONTINUED CROSS-EXAMINATION BY MS. CRONK:

15 Q. Mr. Marek, could I ask you to go to
16 the black binder of documents that we were using, and
17 in particular could I ask you to go, if you would,
18 please to Tab 16 which, you will recall, is the
19 operating plan for the Armstrong Crown Management
20 Unit--

21 A. Right.

22 Q. --1980 to 1990, which you told us --
23 with which you were involved and which you told us
24 bears your signature among others?

25 A. That's correct.

1 Q. You will recall that we looked at
2 this planning previously with respect to its provisions
3 regarding tending activities, and I would now like to
4 discuss with you certain of its other provisions.

5 Could I take you to page 19, if you
6 would, please of the plan.

7 A. Yes.

8 Q. As I understand it, at page 19 of
9 this exhibit are set out the overall objectives of the
10 plan in paragraphs (a) through (f) on that page; is
11 that correct?

12 A. Yeah, that's correct.

13 Q. And dealing with the overall
14 objectives of the plan, subparagraph (a) deals with
15 wood volume production objectives for the plan?

16 A. Correct, yes.

17 Q. Subparagraph (b) deals with
18 priority -- the assignment of priority and identifies
19 that priority is to be given to harvesting overmature
20 stands?

21 A. Yes.

22 Q. Subparagraph (c) provides that
23 regeneration was to be established on all cut-over
24 areas with the exception of permanent roads--

25 A. Yes.

1 Q. --to desirable confer species in
2 accordance with provincial stocking standards?

3 A. Yes.

4 Q. Subparagraph (d) deals with over the
5 term of the plan what the cut-over acreage is to be
6 comprised of?

7 A. Yes.

8 Q. It indicates it was to be balanced among
9 all site types and site classes?

10 A. Yes, that's right.

11 Q. Then subparagraph (e) deals with the
12 nature of cutting operations?

13 A. That's right.

14 Q. And it provides that those were to be
15 carried out in a manner that would minimize site
16 degradation during and subsequent to logging?

17 A. That's right.

18 Q. So stopping there. In this
19 particular plan, it was specifically identified, I take
20 it from this paragraph, that the minimization of site
21 degradation was an objective to be sought?

22 A. Yeah, okay.

23 Q. And specific provision was made for
24 that in the plan?

25 A. That's correct.

1 Q. And then in subparagraph (e) of the
2 plan, there is a further detailed description of the
3 nature of harvesting operations and it provides that:

4 "Harvesting operations will be managed to
5 minimize negative impacts on wildlife and
6 other environmental factors. Wherever
7 possible, operations will be managed to
8 create habitat conditions beneficial to
9 wildlife, particularly moose."

10 Now, stopping there. That, I take it, is
11 the kind of description that can appear in a plan of
12 this kind where it is intended to balance harvesting
13 operations with other values?

14 A. Yes.

15 Q. Then if we could turn next to the
16 specific prescriptions that you included in the plan
17 for various working groups, on the next page, page 20,
18 we have the prescriptions for the jack pine working
19 group. This is entitled Silviculture Section.

20 As I understand the way the plan is
21 organized, in the silviculture section you deal with
22 each working group, specific provisions for each?

23 A. Yes.

24 Q. All right. Dealing just with jack
25 pine and looking at the first paragraph, it is

1 indicated:

2 "The jack pine working group will be
3 operated under the clearcut system.
4 Overmaturity of many of the stands
5 dictates harvesting of substantial
6 blocks. It would be of little benefit to
7 restrict cutting to small area cuts."

8 I take it then, Mr. Marek, please correct
9 me if I am wrong, with respect to this plan there was
10 specific provision made for what you would describe as
11 large area clearcutting due to the overmaturity as
12 described in the plan of many of the stands requiring
13 harvesting?

14 A. No, that is not correct. The
15 prescription was that the area of mature jack pine and
16 also old mature jack pine would be cut in blocks.

17 Q. Yes. Those blocks, however, were not
18 to be restricted to small area cuts? They were not
19 to --

20 A. That's right. If I remember right,
21 they were in the vicinity of up to 60, 70 acres, of
22 that nature.

23 Q. Yes. And it was the clearcut
24 harvesting system that was to be utilized?

25 A. That's correct.

1 Q. And then dealing with spruce over on
2 page 22.

3 A. Correct.

4 Q. These set out the silvicultural
5 prescriptions with respect to this working group and an
6 indication is given that the spruce working group was
7 to be cut under several silvicultural systems?

8 A. That is correct.

9 Q. Dealing first with overmature spruce
10 stands on deep upland sands site, subparagraph (a)
11 provides, does it not, that clearcutting was to be the
12 silvicultural system employed for harvesting purposes?

13 A. Correct.

14 Q. And further, that site preparation
15 was to be either with barrels and chains or with a TTS
16 disk trencher?

17 A. That was the equipment used, correct.

18 Q. All right. Then if I could direct
19 you to the balance of that paragraph, there is an
20 indication as follows:

21 "The prepared ground following site
22 preparing will then be aeriually seeded to
23 jack pine at 15,000 to 20,000 seeds per
24 acre. This, of course, means that all
25 overmature deep upland spruce sites will

1 eventually be converted to the jack pine
2 working group."

3 Now, stopping there for a moment. That
4 was the prescription provided?

5 A. That is correct.

6 Q. Am I correct that that the inclusion
7 and identification of that prescription for the spruce
8 working group on those types of stands specifically
9 contemplated conversion over time?

10 A. In some part of the area. This
11 prescription was later -- well, manifest itself later
12 on in various blocks where we have planted and seeded,
13 and while these silvicultural prescriptions here are
14 fairly, I would say, fairly rigid, we had to use
15 modification in order to implement the renewal.

16 Q. Did the prescriptions initially end
17 as modified over time specifically contemplate
18 conversion over time to the jack pine working group?

19 A. In some area, yes.

20 Q. Yes. And then in subparagraph (b) on
21 the same page, is detailed, as I read the plan, I would
22 ask you to correct me if I am wrong, there is a
23 description of the silvicultural prescriptions that
24 were to apply for overmature lowland spruce sites as
25 distinct from the upland sites?

1 A. That is correct.

2 Q. All right. In those prescriptions it
3 specifically provided that the overmature lowland
4 spruce was to be operated under a group seed tree
5 system?

6 A. That was not proper prescription.
7 However, it was done and we later have to realize that
8 that prescription was not valid, Madam.

9 Q. Why do you say that wasn't a proper
10 prescription?

11 A. Because it should have been done by
12 small area clearcutting, strip cutting or modified
13 cutting. It should have been. It just was not
14 effective because seed groups, the way we implement it,
15 were where small groups of trees which could not supply
16 enough seed and eventually blew down and we didn't have
17 the results what we want.

18 Q. Do I take from that, Mr. Marek, that
19 you do not regard group seed tree systems as being a
20 form of modified harvesting?

21 A. No.

22 Q. You do not?

23 A. No. If you talk about small area
24 clearcut management and, Madam Chair, here again is the
25 terminology, what do we call what.

1 It seems like that I cannot accept group
2 seed system as a small area clearcut management and I
3 suppose that is the problem here.

4 Q. Does that mean then that as you use
5 the term small area clearcutting you mean strictly
6 alternate strip cutting?

7 A. Not necessarily alternate strip. It
8 may be done in all kind of modified strip cutting or
9 small area cutting, shortwood cutting, strip cutting
10 and so on. There are so many different prescriptions
11 or different methods to do that, but as a seed tree
12 system, no, I do not agree with that.

13 Q. And you do not agree that was part of
14 modified harvesting as you use the term?

15 A. Well, it's -- as we use the modified
16 cutting right now, and that term modified cutting which
17 I object very strongly, that's not a proper system. If
18 it system it has got to be called different way.

19 Q. You do not regard it as part of the
20 small area clearcutting that you have described?

21 A. Not as I understand here under these
22 conditions.

23 Q. You said a few moments ago that you
24 regarded these prescriptions, I think you said, as
25 being particularly rigid? Did you say that?

1 A. That is correct. This management
2 plan, as it was worked out, did not specify kind of
3 management which I would prescribe now. And I suppose
4 the writer, Mr. Nakamura who did it, probably would do
5 the same thing; in other words, we had a second thought
6 after this plan came to being and was implemented.

7 Q. You would today provide for more
8 flexibility in the prescriptions --

9 A. I definitely would provide more
10 detailed prescription and also knowledge of these
11 sites.

12 Madam Chair, one of the problems with
13 many of these plans or especially this one, I can't
14 remember, is not accurate knowledge of area which was
15 actually to be managed. The foresters didn't have the
16 time to examine the area properly.

17 We had to come with this plan in order to
18 establish the cutting area for the community of
19 Armstrong and we were pressed of time and, therefore,
20 we didn't have a chance to really qualitatively
21 approach this problem of proper management planning.

22 So it was plan which was done in a big
23 hurry, it was plan we had to change many things later
24 on after we realized what the implications were and --
25 well, go back to the whole management planning and

1 route and the renewal. I thought Mr. Nakamura thought
2 that there was not proper time allocated to the
3 planning process.

4 Q. Do I understand then that were you
5 doing it today the prescriptions would be less rigid
6 and would provide for greater flexibility?

7 A. Madam, these prescription, if I -- I
8 was involved in timber management plans, surely I would
9 look at it much more carefully. Surely, the unit
10 forester would have to have a better knowledge of the
11 area as it was done that time in the case of emergency.

12 Q. Would you strive to avoid the kind of
13 rigidity that you have said is reflected in this plan?

14 A. Well, after having better knowledge;
15 in other words, the whole planning process would be
16 done much more carefully, the knowledge would be much
17 better. So I think that the whole plan would have a
18 better quality. That's what I am saying.

19 Q. Would you strive for less rigidity
20 than you say is reflected in these prescriptions?

21 A. I would strive for less rigidity,
22 that is correct.

23 MADAM CHAIR: Excuse me, Mr. Marek. With
24 respect to a group seed tree system as a silvicultural
25 system, would you recommend that today with the

1 qualification that it would be a small area clearcut
2 approach?

3 THE WITNESS: I would replace that.

4 MADAM CHAIR: You wouldn't do any block
5 seed tree systems today?

6 THE WITNESS: Perhaps as a final cut, as
7 a final cut. You remember we were talking about these
8 different coupe systems. If it's three coupe or two
9 coupe system, there is a possibility the so-called
10 group seed trees could be used. But I definitely
11 wouldn't use it as we did there right from the
12 beginning group seed system.

13 MADAM CHAIR: All right.

14 MR. MARTEL: Can I raise a question. In
15 many of the lowlands, as I understand it, one of the
16 things that is done is to protect the advanced growth.

17 THE WITNESS: That's correct.

18 MR. MARTEL: In this area, was that
19 considered because you say no seed trees, but my
20 understanding is if you have seed trees and some
21 advanced growth that you go along way in
22 re-establishing regeneration naturally as opposed to
23 having to spend a lot of money to do so.

24 That wasn't considered here, or there was
25 no advanced growth?

1 THE WITNESS: That's correct. In some
2 cases there wasn't vigorous advanced growth; in other
3 words, the layers depend very much on the density of
4 the origin of stands and the stocking. In other words,
5 you have an open stand, the branching down to the
6 ground, you have lot of layers.

7 Now, that doesn't apply for all black
8 spruce stands. Now, in this case, we have a fairly
9 dense fire originated stands which were broken up, as I
10 showed to you in some of the slides where the decadence
11 was setting in where the large areas were already blown
12 down and, therefore, we have -- you know, we have
13 changed our seed. We use couldn't use the layers, they
14 were not there. In some cases they are.

15 It's interesting, these different sites
16 you count in the boreal forest, they may change from
17 site to sight; in other words, you have one condition
18 here and a hundred metres away you have a completely
19 different condition. But if you use one system, large
20 area clearcutting, then of course it doesn't apply.

21 MR. MARTEL: What necessitated the speed
22 at which that plan was developed? Was that the time
23 that the airport closed--

24 THE WITNESS: Correct.

25 MR. MARTEL: --and there were no jobs for

1 the local citizens?

2 THE WITNESS: Correct. It was emergency
3 which was politically motivated in one way, social,
4 economics and so on. And the forester who came up
5 here, he was parachuted in overnight more or less and
6 let's do it, and let's do this. I was involved in it.
7 I was involved in road lay-up and the whole program and
8 it was emergency in case of Armstrong survival and...

9 MS. CRONK: Q. Then, as I understand it,
10 in this plan, Mr. Marek, provision was made for
11 modified harvesting on mature spruce stands on lowland
12 sites?

13 A. Lots of change, Madam. I pointed out
14 to you there were lots of changes to this plan.

15 Q. In the plan as written, that was
16 the -- we talked about upland sites, then we talked
17 about overmature lowland sites, now I am talking about
18 mature lowland sites.

19 As I understand it, modified harvesting
20 was the recommended prescription for those?

21 A. Right.

22 Q. Could I ask you to go, if you would,
23 please, over to page 28.

24 A. Other coniferous working group?

25 Q. Yes. On page 28, as I understand it,

1 the prescription for other conifers as distinct from
2 the spruce and jack pine are set out and it provides
3 that the other conifers working group has not been
4 assigned an allowable cut and the stands were
5 predominantly cedar and a descriptoon of them is set
6 out in the first paragraph; is that correct?

7 A. Yes.

8 Q. Then in looking at what was intended
9 over the long-term for those conifer stands, looking at
10 the last paragraph, it is indicated:

11 "Regeneration will have to be carried out
12 if and when the stands are cut out.

13 These areas will very likely be planted
14 to spruce eventually."

15 Now, stopping there. I take it that the
16 plan, therefore, provided for these types of conifer
17 working groups for species conversion over time to
18 spruce?

19 A. That was written up, but was not
20 taken seriously later on because we just did not have
21 the opportunity to do that. Many of these stands were
22 bypassed due to the demand for the primary species.

23 So actually this paragraph here hasn't
24 got a practice because it didn't get implemented.

25 Q. Let me be clear. At the time the

1 plan was written up and completed and authorized, it
2 provided for species conversion over time in the other
3 conifer working group?

4 A. That's correct.

5 Q. And had the cedar areas been cut,
6 that is what the plan would have been provided for --
7 would have provided for?

8 A. To certain extent. To some degree,
9 yes.

10 Q. All right. We have then, based on
11 this plan, provision at the time that it was finalized
12 and authorized for conversion to the jack pine working
13 group of overmature and deep upland spruce sites and,
14 in addition, conversion of other conifer working groups
15 to spruce both over time.

16 I take it then, Mr. Marek, based on this
17 plan you recognize circumstances in which species
18 conversion is entirely appropriate?

19 A. Yes, if it's appropriate to the
20 sites, if it's appropriate to other conditions which
21 may be fairly complex and fairly involved.

22 You see, I stated to you, Madam, right
23 from the beginning that this plan was emergency plan to
24 do quickly, get it through, so the authorization was by
25 the Ministry to start the operation and certainly we

1 have learned later on that it does just not work as
2 efficient as it should.

3 Q. Elements of the plan didn't work?

4 A. Element of planning.

5 Q. Regardless, though, of the experience
6 over time with this plan, I take it you would
7 acknowledge there are circumstances in which species
8 conversion is appropriate depending on site
9 circumstances?

10 A. There is a possibility, that's
11 correct.

12 Q. Thank you. Now, on Thursday last we
13 were speaking towards the end of the day about your
14 evidence regarding planting measures.

15 Sorry, Mr. Marek, we have got the noise
16 in the background so I will speak as loudly as I can.
17 If you can't hear me --

18 A. Madam, I hear you clearly.

19 Q. Thank you. We were speaking at the
20 end of the day last Thursday about your evidence
21 regarding various planting measures and the evidence of
22 the Beardmore Society and its witness statement about
23 various planning efforts in the areas with which you
24 are familiar.

25 A. Yes.

1 Q. You will recall that I had some
2 questions for you about the suggestion that
3 inappropriate planting sites were being utilized. You
4 recall our discussion about that?

5 A. That's correct.

6 Q. Could I ask you to go to Tab 43
7 please of the binder. Now, at Tab 43 of the -- Tab 43,
8 Mr. Marek.

9
10 A. Yeah, I have it.

11 Q. No, it is the next tab, sir.

12 A. Okay.

13 Q. At Tab 43 of the black binder appear
14 photographs -- sorry, photocopies of five photographs
15 which unfortunately are not terribly clear from the
16 black and white, but dealing first --

17 A. Some of them are upside down, Madam.

18 Q. That could well be.

19 MS. SWENARCHUK: Is this from the
20 Beardmore evidence?

21 MS. CRONK: No, they are not.

22 Q. Dealing first with photograph No. 1,
23 I am going to show you the original of that photo, Mr.
24 Marek.

25 A. Yes.

1 MADAM CHAIR: Do you want these to be an
2 exhibit, Ms. Cronk?

3 MS. CRONK: Yes. The summary, yes.
4 Thank you.

5 MADAM CHAIR: It will be Exhibit 1575.

6 MS. CRONK: Thank you, Madam Chair.

7 ---EXHIBIT NO. 1575: Photocopies of five photographs
8 contained in Tab 43 of black
 binder.

9 MS. CRONK: Q. Mr. Marek, this is a copy
10 of the first photograph that appears in the exhibit
11 that we have just marked and it is my understanding
12 that it was taken in the Lake Nipigon Forest near the
13 corner of Beardmore Road and Peck Lake Road.

14 I assume you know that area?

15 A. I'm aware of the area.

16 Q. All right. It shows a jack pine
17 plantation six to seven years after harvest.

18 Just looking at the photograph, Mr.
19 Marek, you would agree with me it shows jack pine
20 planted on virtual bedrock? There is exposed bedrock
21 in the picture?

22 A. The jack pine was planted in the
23 pockets of soil between the bedrock.

24 Q. Yes. And --

25 A. Between the rock, correct. Bedrock.

1 Q. Thank you. Looking at the picture,
2 it shows in the type of bedrock exposed area that you
3 have described to the Board the results of a particular
4 planting effort of jack pine? That's what we have
5 here?

6 A. Yes, I'm aware of the area.

7 Q. All right. Do you regard the trees
8 depicted in this photo as being healthy and vigorous
9 specimens of jack pine?

10 A. Yes, they are very well grown now.

11 MS. CRONK: Madam Chair, could we mark
12 the original photos of these as we move through them as
13 separate exhibits, would that be appropriate, or just
14 A?

15 MADAM CHAIR: Exhibit A.

16 MS. CRONK: "A" would be fine. That will
17 be Exhibit 1575A then.

18 MADAM CHAIR: Would you describe that
19 just quickly, Ms. Cronk.

20 MS. CRONK: Yes. It is a photograph of a
21 jack pine plantation on the Lake Nipigon Forest FMA,
22 that's the Domtar FMA, it was taken on October, 1990,
23 on a bedrock exposed area.

24 ---EXHIBIT 1575A: Photograph of a jack pine
25 plantation on the Lake Nipigon
Forest Domtar FMA on a bedrock

1 exposed area, dated October 1990.

2 MS. CRONK: Q. Now, the next photograph
3 in the series, Mr. Marek, and I --

4 A. No. 2?

5 Q. Yes, No. 2.

6 A. Correct.

7 Q. I discovered that -- I am going to
8 show you No. 2.

9 Now, as I understood your evidence, Mr.
10 Marek, as you presented a number of slides to the Board
11 you expressed concern about the planting of trees and
12 what you described as black muck. Do you recall that?

13 A. That's correct.

14 Q. All right. You suggested that was
15 inappropriate and was to be avoided?

16 A. That is correct.

17 Q. All right. Looking at this
18 photograph, which I understand was again taken on the
19 Lake Nipigon FMA in Vincent Township just off Road
20 284 --

21 A. Yes, I know that road.

22 Q. Of course you do. Taken in October
23 of this year, October 1990. First of all, am I correct
24 that it shows black spruce in the picture?

25 A. That's black spruce.

1 Q. And it shows black spruce planted in,
2 to use your term, black muck?

3 A. I was not there when these spruce
4 were planted, but, Madam, I wouldn't hesitate to doubt
5 it was planted in black muck. It could have been
6 planted on sphagnum or some areas which is not directly
7 or could be call flooded black muck.

8 Q. It certainly shows black muck in the
9 picture; does not it?

10 A. Oh, yes, partly.

11 Q. And in the area shown in the picture,
12 would you agree with me that there are healthy black
13 spruce apparent?

14 A. I know that area very well. As a
15 matter of fact, I was there probably the same or nearly
16 the same time when that picture was taken and some of
17 them are healthy, some of them are not healthy.

18 Q. Looking at the spruce shown in this
19 picture, you would agree with me they are appear to be
20 healthy?

21 A. Yeah, appear. One, two, three
22 healthy and there's two or three smaller ones which
23 don't appear to be that healthy. There is all kind of
24 other...

25 Q. When you look at the picture there

1 are numerous spruce in the picture; are there not?

2 A. One, two, three big ones or four big
3 ones and one, two, three on the right small ones.

4 Q. And looking in the background there
5 are all kinds of black spruce?

6 A. No.

7 Q. You don't see black spruce there?

8 A. I don't see any black spruce there.

9 Q. I see.

10 MS. CRONK: Could that be marked, Madam
11 Chair, as 1575B?

12 MADAM CHAIR: Yes.

13 ---EXHIBIT NO. 1575B: Photograph taken on the Lake
14 Nipigon FMA in Vincent Township
off Road 284, dated October 1990.

15

16 THE WITNESS: I see all kind of alders
17 and willows there and probably ledum and some
18 eracacious plants. I don't see too much spruce there.

19 MS. CRONK: Q. You say there are six?

20 A. Altogether. Perhaps eight in the
21 area of acre or so.

22 Q. Mr. Marek, I am going to come back to
23 the balance of the photographs, but I have a few
24 questions for you, if I Jcould, please, on the
25 Beardmore Watchdog Society statement.

1 Perhaps you could put that in front of
2 you, if you would, please. Could I ask you to go to
3 page, 3 if you would, please?

4 A. Roman three?

5 Q. Arabic three?

6 A. Arabic, yes.

7 Q. At page 3 under Subject Area A,
8 begins a description of the Lake Nipigon Forest and
9 forest sites?

10 A. Correct.

11 Q. And immediately after that the
12 following is indicated in the first sentence:

13 "The Beardmore-Lake Nipigon..."

14 MR. FREIDIN: While we are taken this
15 break, what page are we on?

16 MS. CRONK: Page 3. Sorry, I was just
17 waiting for the noise to stop.

18 Q. The first sentence reads:

19 "The Beardmore-Lake Nipigon Watchdog
20 Society defines the Lake Nipigon forest
21 as that area contained in the Lake
22 Nipigon watershed."

23 Do you see that?

24 A. That's correct.

25 Q. All right. It becomes important

1 then, I take it you would agree, to understand the
2 evidence given by the Beardmore Society as presented by
3 you to understand what is meant by the Lake Nipigon
4 watershed because that's the area of the forest that
5 you are talking about; is that correct?

6 A. Well, there are different terms using
7 throughout here, Madam. Beardmore-Lake Nipigon
8 Watchdog Society defines the Lake Nipigon Forest, Lake
9 Nipigon Forest FM -- forest management Lake Nipigon
10 Forest.

11 Q. As I understand what is being said
12 here is that the society defines the Lake Nipigon
13 Forest as the area contained in the Lake Nipigon
14 watershed; correct?

15 A. Correct.

16 Q. All I am saying to you is that it
17 becomes to know what the Lake Nipigon watershed is
18 then?

19 A. Correct.

20 Q. If you could go over to page 7, there
21 is an illustration of why it becomes important to
22 understand that. In the last two paragraphs on page 7
23 is a discussion of various planting efforts and the
24 suggestion that we looked at on Thursday, looking at
25 the first sentence at the bottom of page:

1 "The unsuitable areas..." that refers to
2 allegedly unsuitable planting areas,

3 "are allegedly interspersed throughout
4 the whole area of the Lake Nipigon
5 watershed."

6 A. Right.

7 Q. So, again, it is important to know
8 what the Lake Nipigon watershed is?

9 A. Yes.

10 Q. What I am going to ask you to do, Mr.
11 Marek, if you would, please, I am going to provide you
12 with an extra copy of Exhibit 1556 which is at Tab 3 of
13 your black binder. You remember?

14 A. Yeah, I remember.

15 Q. That's the map we that looked at when
16 our discussion began showing various management units
17 in the Nipigon area coloured in various colours?

18 A. Right.

19 Q. I am going to ask you, if you would,
20 please, to take a blue pen on this copy and just draw
21 in a circle for me, if you would, please, the areas
22 that the Society and you say form the Lake Nipigon
23 watershed.

24 A. There is strictly watershed, Madam.

25 Q. Yes.

1 A. Okay. There is watershed. I don't
2 know if you can see it.

3 MS. SWENARCHUK: May I see it, Mr. Marek?

4 THE WITNESS: There is a line there.

5 MS. CRONK: Q. The blue line indicates
6 the Lake Nipigon watershed area?

7 A. In terms of what watershed mean,
8 Madam; in other words, the rivers flowing in the Lake
9 Nipigon or Nipigon River.

10 Q. Thank you.

11 I will provide this to the Board, Madam
12 Chair, I only have the one copy, in just just a moment.

13 As I review what you have done, it shows
14 the Auden licence area of Abitibi-Price as being
15 virtually entirely included in the Lake Nipigon
16 watershed area?

17 A. That's correct.

18 Q. It shows better than half, but
19 certainly not 100 per cent, of the Lake Nipigon FMA
20 Domtar Management Unit as included in the watershed
21 area?

22 A. That's right.

23 Q. It shows part of the Armstrong Crown
24 Management Unit as being included?

25 A. That's correct.

1 Q. It shows part of the Black Sturgeon
2 Forest, about 80 per cent--

3 A. Well...

4 Q. --included; is that correct?
5 Thereabouts?

6 A. Yes.

7 Q. And a small portion of the Spruce
8 River Forest, Abitibi-Price?

9 A. That's correct.

10 Q. All right, thank you. Now, the
11 Society if its statement of the evidence, Mr. Marek,
12 that you are presenting, also refers from time to time
13 to the Lake Nipigon area?

14 A. That's right.

15 Q. And in the interrogatories posed and
16 the answers provided, the Society indicated without
17 further elaboration that the Lake Nipigon area was not
18 the same as the Lake Nipigon watershed?

19 A. That is correct.

20 Q. With your red pen that I am providing
21 to you, could you please draw in other circle or
22 appropriate shape what the Lake Nipigon area is for the
23 purposes of the evidence that you have given on behalf
24 of the Society.

25 A. Much wider circle around Lake

1 Nipigon.

2 Q. Thank you very much. As you said, a
3 much larger circle including more of the management
4 units that we just spoke of?

5 A. That's correct.

6 Q. Including all of the Lake Nipigon
7 Domtar FMA?

8 A. That's correct.

9 Q. And a larger portion of the Black --

10 A. Surgeon.

11 Q. Sorry. A larger portion of the
12 Spruce River Forest?

13 A. Yes.

14 MS. CRONK: Madam Chair, could this be
15 marked as the next exhibit, please.

16 MADAM CHAIR: Yes, that will be Exhibit
17 1576.

18 MS. SWENARCHUK: 1576?

19 MADAM CHAIR: That's right, Ms.
20 Swenarchuk.

21 Can we hear your explanation of this one,
22 Ms. Cronk?

23 MS. CRONK: The exhibit is a duplicate
24 copy of Exhibit 1536, I believe, showing in a blue
25 circle the composition of the the Lake Nipigon

1 watershed according to the Beardmore Society and
2 showing in red the composition of the Lake Nipigon area
3 according to the Beardmore Society.

4 MADAM CHAIR: These markings are done by
5 Mr. Marek.

6 MS. CRONK: Yes.

7 MADAM CHAIR: Thank you.

8 ---EXHIBIT 1567: Duplicate copy of Exhibit 1536
9 showing in a blue circle the
10 composition of the Lake Nipigon
11 watershed according and showing in
12 red the composition of the Lake
13 Nipigon area according to the
14 Beardmore Watchdog Society

15 MS. CRONK: Madam Chair, Mr. Martel,
16 there are a number of interrogatories that relate to
17 this issue and I don't propose to go through them, but
18 for the later assistance of the Board if I could
19 identify them for you. They are before you in the
20 black binder, OFIA interrogatory No. 5, for the
21 Beardmore statement.

22 MADAM CHAIR: These are all Tab 1?

23 MS. CRONK: Most of them are, yes. I am
24 just going to identify them for you, Madam Chair.

25 OFIA No. 5 for the Beardmore statement,
26 OFIA 10 for the Beardmore statement and MNR
27 interrogatory No. 5 for the Beardmore statement.

I wonder if I might have that last

1 exhibit back again, Madam Chair, to put some questions
2 to Mr. Marek.

3 MADAM CHAIR: (handed)

4 MS. CRONK: Thank you.

5 Q. Mr. Marek, again, as you have
6 depicted the area of the Lake Nipigon watershed it
7 includes the entirety of the Auden management unit; is
8 that correct?

9 A. That's correct.

10 Q. All right. Could I ask you to go
11 please, if you would, to Tab 44.

12 A. Yes.

13 Q. At Tab 44 of the black binder
14 appears --

15 A. Paragraph 14 -- page 14, paragraph 4?

16 Q. Yes.

17 MS. CRONK: That is MNR interrogatory No.
18 18, Madam Chair, from Forests for Tomorrow Panel No. 3,
19 not the Beardmore statement. I wonder if that could be
20 marked as the next exhibit, please.

21 MADAM CHAIR: That will Exhibit 1577.

22 ---EXHIBIT NO. 1577: MNR Interrogatory No. 18 and
23 answer thereto (FFT Panel 3).

24 MS. CRONK: Q. Now, Mr. Marek, in this
25 particular question you were -- a quote was set out

1 from a portion of Forests for Tomorrow's Panel 3
2 evidence relating to what were described as generalized
3 statements from a publication by the Canadian Pulp and
4 Paper Association, and you were asked to describe the
5 sites to which those generalized statements should not
6 be applied and that was because in the witness
7 statement it was suggested that generalized statements
8 of that kind would not be applied to much of the
9 northern Ontario forests.

10 That's just the background of the
11 question.

12 In providing the answer -- is this your
13 answer? Does it reflect your views, the answer
14 provided?

15 A. The answer:

16 "In shallow tills over bedrock..."

17 Q. The entire answer, does it reflect
18 your views?

19 A. Yes, we better read what we are
20 talking about, Madam.

21 Q. Could you just take a moment, please,
22 and read that entire paragraph to yourself and indicate
23 to me if it reflects your views.

24 A. That's correct.

25 Q. That it does reflect your view?

1 A. No, reflects the view of the Society.

2 Q. Is that your view?

3 A. I support that view.

4 Q. The second -- the third sentence of
5 the answer -- well, to assist on the record, the answer
6 reads:

7 "In shallow tills over bedrock and
8 lowland sites susceptible to high water
9 tables. Large area clearcutting of these
10 sites even if planted is unlikely to
11 produce desired results."

12 A. That's correct.

13 Q. "Good natural regeneration seldom
14 occurs after clearcutting in upland
15 black spruce or jack pine forests."

16 A. That's correct.

17 Q. Stopping there for moment. I take it
18 that's your opinion?

19 A. Yes.

20 Q. All right. Could I ask you to go
21 back, if you would, please to Tab 43, the photographs,
22 and this time I would ask you to look at photograph No.
23 3.

24 A. Madam, I cannot see, just a white
25 little dot here.

1 Q. (handed) Looking at photograph No.
2 3, Mr. Marek, I am informed that that photograph was
3 taken looking westward over Davidson Lake to Ombabika
4 Bay on Lake Nipigon. I take it you are familiar with
5 the area?

6 A. Yes, I'm familiar with that very
7 well.

8 Q. Would you agree with me that it
9 indicates good black spruce regeneration?

10 A. Good is a relative term. I know that
11 area very well. In many instances I wouldn't classify
12 it as good regeneration of black spruce.

13 Q. Looking at the expanse of area
14 depicted in that area, would you agree -- first of all,
15 that is naturally regenerated black spruce, as I
16 understand it?

17 A. That is correct.

18 Q. Yes. And I suggest to you that
19 looking at the expanse of that area of black spruce, it
20 indicates very acceptable natural black spruce
21 regeneration? You would agree?

22 A. Is that acceptable to the Industry or
23 is that acceptable to you, Madam?

24 Q. I am asking for your opinion. Would
25 you agree with me?

1 A. Yes, I don't. It is not a good
2 natural regeneration or regeneration that was there
3 before; in other words, stands which were there before.

4 Q. What is unacceptable about it? Was
5 is there in that regeneration depiction that you regard
6 as unsatisfactory?

7 A. Madam Chairman, may I explain it this
8 way. This was area was cut first or second year of my
9 present and we have together with Abitibi --

10 Q. If I could stop there, Mr. Marek,
11 just so you are clear on the facts, and then by all
12 means give whatever explanation you want.

13 My understanding is that it reflects
14 harvesting in the late 1940's that were allowed to
15 regenerate naturally.

16 A. Some of it was 40's, some of it was
17 50's, Madam. I don't think this was just -- then we
18 are talking about different areas.

19 Q. That's my point. Looking at the area
20 in that photograph, so you are clear as to where it was
21 taken, in fairness to you, it was taken looking
22 westward over Davidson Lake to Ombabika Bay on Lake
23 Nipigo and it reflects areas harvested in the late
24 1930's and late 1940's that were allowed to come back
25 to natural black spruce regeneration.

1 With that factual basis, my question to
2 you is: Would you agree with me that it reflects
3 acceptable natural black spruce regeneration?

4 A. There are several areas, and I see
5 the Ombabika Bay behind, which more or less put more
6 focus on these stands here. It was done with the
7 logging which protected quite a bit of advanced growth,
8 it was done by logging techniques which was done in
9 winter, it was done in times which in the 1940's and
10 50's the system was harvested.

11 Q. Excuse me. Mr. Marek, my question
12 was: Do you agree that it reflects acceptable natural
13 black spruce regeneration?

14 A. Acceptable? You talk about 40 per
15 cent stocking?

16 Q. Does it --

17 A. You see, Madam, you are throwing at
18 me -- is that acceptable by whom.

19 Q. Do you think visually, based on your
20 experience --

21 A. Visually. I cannot accept any of
22 these visually.

23 Q. I see.

24 A. To the benefits here, we did some
25 sampling here way back in the 50's and we have found it

1 was 60 per cent stocked. I had some information by
2 Abitibi which was approximately 60 per cent stocking.

3 Now, from the aerial view it looks all
4 right, if you want to classify it that way, it's better
5 than nothing, lots of tamarack there, it is a lowland
6 obviously.

7 But if I remember right, Madam, these
8 areas were restocked to 60 per cent. They may be, of
9 course, better now.

10 Q. They were?

11 A. They were around 60 per cent
12 stocking.

13 Q. Black spruce?

14 A. That's right.

15 Q. Your suggestion was in the
16 interrogatory answer, Mr. Marek, that good natural
17 regeneration seldom occurs after clearcutting in upland
18 black spruce or jack pine forest, and what I am
19 suggesting to you, first, is this is an example of
20 natural regeneration of black spruce after clearcutting
21 on a site such as that and it provides an example of
22 exactly the opposite, good natural regeneration?

23 A. You said upland?

24 Q. You perceive that as a lowland site?

25 A. Yes.

1 MR. MARTEL: Could I ask you question
2 because I see three distinct layers there. The
3 foreground--

4 THE WITNESS: That's right.

5 MR. MARTEL: --where it seems to be --
6 everything seems to be, except for a few in the
7 right-hand corner, something appears to be amiss and a
8 swath down the middle where a lot of it is ground.

9 I assume these are trees that are dying,
10 I'm not sure, and then you have got --

11 THE WITNESS: That's tamarack.

12 MR. MARTEL: Then a swath in the
13 background that looks very green as opposed to the
14 swath down the middle.

15 My question is, what is causing all that
16 down the middle?

17 THE WITNESS: Are you questioning me?

18 MR. MARTEL: Yes, I am questioning you?

19 THE WITNESS: In foreground nearly pure
20 black spruce, that spruce was not been cut. It is the
21 old stand which was, as a matter of fact, still there.

22 Middle site, where you have lots of
23 tamarack here, that's cut-over and also there is a
24 cut-over over here. You have actually did distinct
25 stands; one in the foreground, the old cut-over in the

1 background, which I talk about 60 per cent stocking.

2 MS. CRONK: Q. Am I correct, Mr. Marek,
3 that the golden coloured trees do not reflect mortality
4 but tamarack?

5 A. Tamarack, that's correct.

6 Q. Am I also correct that picture
7 depicts a mixture of upland and lowland sites? It is
8 not all lowland; is it?

9 A. This foreground has (inaudible) and
10 this is a lowland where the tamarack occurs.

11 Q. And throughout the picture there are
12 sections of uplands; are there not?

13 A. There are sections in the background
14 here.

15 Q. In the background area, would you not
16 agree that's a good example of good natural
17 regeneration of black spruce on upland sites? Yes or
18 no, Mr. Marek?

19 A. No.

20 Q. Why not?

21 A. Because it doesn't have good stock
22 which I expect from cut-over. When somebody comes and
23 tells me 40 per cent is satisfactory and somebody says
24 60 per cent is satisfactory, I still feel we should
25 have more than that; in other words, we should have at

1 least 80 per cent.

2 Q. Without 80 per cent you don't regard
3 it as good natural regeneration?

4 A. No.

5 MS. CRONK: Madam Chair, could that be
6 marked as Exhibit 1575C.

7 ---EXHIBIT NO. 1575C: Photograph looking westward over
8 Davidson Lake to Ombabika Bay on
9 Lake Nipigon reflecting areas
10 harvested in the late 1930's and
late 1940's that were allowed to
come back to natural black spruce
regeneration.

11 THE WITNESS: May I point out, Madam
12 Chair, here this area has been restocked mainly by
13 layering; in other words, the original layers which
14 were there during the cutting and by careful winter
15 logging, at that time with horses, sleighs and so on.

16 These layers were protected and,
17 therefore, we have the 60 per cent regeneration there
18 and here 60 per cent - I am quoting the Abitibi data
19 which were given to me in 50's where other cutting
20 occurs not far away from here.

21 MS. CRONK: Q. Could I have the picture
22 back, please, Mr. Marek.

23 A. Yes. Do you want all three of them,
24 Madam?

25 Q. Thank you. Yes.

1 THE WITNESS: By the way, Madam Chair,
2 while we have these pictures here, we did do to some
3 cull surveys and some quality surveys in these stands
4 which was -- I don't know if it was as a resident...

5 Did we file it as a statement?

6 MS. SWENARCHUK: Not to my knowledge, Mr.
7 Marek.

8 THE WITNESS: Anyway, we did some survey
9 on these stands in that area.

10 MADAM CHAIR: That was when you were with
11 the Ministry?

12 THE WITNESS: That was 1950's when I was
13 with Lands and Forests. It was done with Mr. Linn, a
14 unit forester at that time at Abitibi.

15 MS. CRONK: Q. One of the other slides
16 which you gave evidence, Mr. Marek, was slide 71 and I
17 am showing you a photocopy, a copy of a photograph of
18 slide 71.

19 A. That's right.

20 Q. And in part your evidence with
21 respect to slide 71 - as set out in the transcript,
22 Madam Chair, Volume 254 at page 45,743 - you described
23 this as being a disturbed organic site on the Spruce
24 River FMA.

25 A. That's correct.

1 Q. You indicated that it was indicative
2 of both uplands and lowlands and you described what was
3 to be seen in the photograph and then you were asked
4 this question:

5 "Now, if through planting or some
6 regeneration option trees become
7 established here, would you expect
8 to receive or obtain a stand
9 with good stocking on this site?"

10 And your answer was:

11 "Depending on time, depending on many
12 factors. There is no straight answer to
13 this. One answer I can give you, Ma'am,
14 is that it's going to take a long
15 time depending on many factors. It may
16 change from site to site. There is
17 nothing a hundred per cent in this case
18 because it all depends on the dynamics of
19 the site and the environment itself."

20 A. That's correct.

21 Q. All right. Mr. Marek, I am showing
22 you now the fourth photograph that appears in the set
23 of photocopies I have given to you.

24 Would you agree with me first, Mr. Marek,
25 it depicts, although from a greater distance, but

1 nonetheless it depicts a site very similar to the site
2 depicted in your slide 71?

3 A. Madam Chair, as a matter of fact I
4 think it's the same site.

5 Q. Yes. And with respect to the
6 conditions shown in photograph No. 4, it indicates a
7 deep sphagnum peat site on the Spruce River Forest?

8 A. That's correct.

9 Q. And would you agree with me with
10 respect to the conditions shown in this site, it having
11 been clearcut I understand in 1984, that it does depict
12 a very broad area of the kind that you described in
13 slide 71, it is just a larger area?

14 A. It's the same area.

15 Q. I am going to show to you slide No.
16 5.

17 MADAM CHAIR: Do you want that to be
18 Exhibit 1575D, Ms Cronk?

19 MS. CRONK: Yes, thank you, Madam Chair.

20 ---EXHIBIT 1575D: Photograph depicting a deep sphagnum
21 peat site on the Spruce River
 Forest.

22 MS. CRONK: Q. Slide No. 5 which is a
23 close-up of the last photograph, 1575D, that I showed
24 you?

25 A. That is correct. I take it for

1 granted it is the same.

2 Q. Yes. And, Mr. Marek, would you agree
3 with me, looking at what's depicted in photograph No.
4 5, that it clearly shows regeneration, healthy natural
5 regeneration of black spruce coming in?

6 A. On sphagnum moss.

7 Q. Yes, in front of the ground.

8 Q. You would agree?

9 A. That's right.

10 Q. Yes.

11 MS. CRONK: That, Madam Chair, I would be
12 asked to be E please, 1575E.

13 MADAM CHAIR: All right.

14 ---EXHIBIT NO. 1575E: Close-up of Exhibit No. 1575D
15 depicting a deep sphagnum
16 peat site on the black Spruce
River Forest.

17 MS. CRONK: Q. So what we have in this
18 photograph, Mr. Marek, is the same site as shown in
19 your slide 71 depicting, I understand, after
20 clearcutting good natural black spruce regeneration
21 emerging on this type of site?

22 A. On a partial site.

23 Q. On the part of the site shown in
24 photograph 5?

25 A. On the sphagnum which rebuild itself,

1 that's right.

2 Q. You would agree with me, looking at
3 the conditions shown in photograph No. 5, that there is
4 no reason to believe that that site won't have good
5 black spruce stocking potential?

6 A. Madam Chair, here is the background.
7 This is a moose corridor which was left as a seed
8 source here. The distance between, I would say it was
9 around 3-, 400 feet; in other words, picture taken here
10 and microsites which were created here are not far away
11 from the seed source. I would say 250 feet.

12 Q. Do you agree with me, Mr. Marek,
13 looking at the conditions depicted in photograph No. 5,
14 there is no reason to believe that this area won't have
15 good stocking based on what you see here?

16 A. This specific area of sphagnum is a
17 good stocking. I was just there just a few weeks ago.

18 Q. In fact it is my understanding that
19 the area of your photograph or slide 71, as depicted in
20 photographs D and E, in fact has about 60 per cent
21 stocking today. Can you confirm that for me, or do you
22 know?

23 A. I don't know what the stocking is on
24 these areas which is invaded by ledum there; in other
25 words, what I'm saying here that the area is well

1 stocked here and may not be stocked over there.

2 I didn't do stocking sampling, but I
3 visited. I can assure you the stocking in this
4 microsite is much better than stocking in this ledum
5 competition site in the background, although it is
6 closer to the seed source, Madam.

7 Q. I take it from that answer, Mr.
8 Marek, and the fact you didn't do stocking surveys in
9 the area that you would have no basis to dispute
10 whatever the stocking numbers are there, you don't
11 know?

12 A. No, I don't know. I don't know what
13 the stock is. I visited this area, I didn't take any
14 sampling, no.

15 Q. Thank you very much. Could I ask you
16 to go back to the Beardmore Watchdog Society statement,
17 please, at page -- perhaps at page 1. We should start
18 there.

19 A. Page 1. "History of forest
20 management..."

21 Q. In the Lake Nipigon area?

22 A. Yes, that's correct.

23 Q. In paragraph 2 on page 1, you are
24 talking about or at least the Society is talking about
25 cutting or harvesting that was allowed in the past on

1 the Lake Nipigon Islands?

2 A. That's correct.

3 Q. If we go over to page 13, again there
4 is a specific discussion with respect to harvesting on
5 the Lake Nipigon Islands?

6 A. Lake Nipigon Islands, correct.

7 Q. Yes. There is a suggestion of the
8 kinds of damage which allegedly occurred from past
9 harvesting on the islands?

10 A. Yes, that's the discussion there.

11 Q. Am I correct, Mr. Marek, that there
12 has been no commercial harvesting on the islands for at
13 least 25 years?

14 A. Pretty close 25 years, correct.

15 Q. Or longer? At least 25 years?

16 A. It has been harvested before, but I
17 think the last operation was in mid 60's or so.

18 Q. So when you are talking or the
19 Society is talking about damage which allegedly took
20 place on the islands from harvesting you are talking
21 about events of over 25 years ago?

22 A. There was sporadic harvesting done
23 along the shorelines by natives, by people who were
24 building cabins, but larger operation, I agree 25 years
25 ago.

1 Q. No commercial harvesting except for
2 25 years ago?

3 A. 25 years ago.

4 Q. Yes. So what I am suggesting to you
5 is that in this statement where we review the section
6 dealing with damage that allegedly occurred on the
7 islands we are talking about events of over 25 years
8 ago?

9 A. Correct.

10 Q. Then the next area, and I think you
11 told the Board this, but you could confirm it for me
12 now, if you would, please.

13 You, of course, are familiar I know with
14 the Lake Nipigon integrated resource management plan.
15 You talked about that with the Board?

16 A. I'm aware of it and I read it several
17 times, but definitely not expert on multi-purpose.

18 Q. You are familiar with the plan, you
19 have read it?

20 A. Plan. Yes, I read it.

21 Q. It specifically prohibits any
22 harvesting on the Lake Nipigon Islands; does it not?

23 A. Correct.

24 Q. All right. Now, the next issue that
25 you talked about specific to the Lake Nipigon area with

1 the Board was harvesting in the 300-metre Lake Nipigon
2 shoreline?

3 A. That's correct.

4 Q. Remember this issue, you talked about
5 that on behalf of the Society?

6 A. That's correct.

7 Q. Could I ask you to go to page 14,
8 please.

9 A. Of...?

10 Q. Of the Beardmore statement.

11 A. Yes, Lake Nipigon shoreline.

12 Q. That's where the discussion about the
13 shoreline and harvesting within the 300-metre shoreline
14 area begins and it continues over on to page 15?

15 A. Right.

16 Q. And I would draw your attention to
17 the second last paragraph on page 15 beginning with
18 with word "objective".

19 Do you see that? It says: "Objective to
20 manage timber resources within 300
21 metres..."

22 A. Objective contained in MNR, at the
23 bottom there?

24 Q. Immediately above that, the indented
25 paragraph.

1 A. Activities for the area No. 7?

2 Q. Yes. And there are two quotes from
3 the Lake Nipigon integrated resource management plan
4 set out there, the second of which begins with the word
5 "Objective to manage timber resources...."

6 Do you see that?

7 A. "Objective to manage timber resources
8 within 300 metres of Lake Nipigon
9 shoreline while having high regard for
10 recreation and tourism values of the
11 lake."

12 Q. Now, as I understood your evidence to
13 the Board, it was that the Beardmore Society interprets
14 the word "manage" in that context as meaning harvest?

15 A. That's what the Society feels.

16 Q. That's a concern?

17 A. That's correct.

18 Q. Now, as I understand it, perhaps we
19 could go over to 16 as well, that's where that is
20 concern -- sorry, that's where that is confirmed?

21 The Society is concerned that by putting
22 the Lake Nipigon shoreline into what's described by the
23 Society as a narrow 300-metre area of concern or
24 modified management area--

25 A. Right.

1 Q. --the MNR has indicated that this
2 concern may be one in theory only.

3 So they are worried about the fact that
4 the word "manage", insofar as they are concerned, means
5 harvest and they are worried that designating it as an
6 area of concern isn't good enough, if I can put it that
7 way?

8 A. That's correct.

9 Q. It is my understanding, Mr. Marek,
10 and I would ask you to confirm this for me, that the
11 300-meter shoreline on Lake Nipigon falling within --
12 let's talk about first the Lake Nipigon forest FMA, the
13 Domtar FMA, that the 300-metre shoreline is not part of
14 Domtar's FMA, it no longer falls within the FMA land
15 base. Am I right in that?

16 A. That is the case I think, yes.

17 Q. And, similarly, on the Spruce River
18 Forest, the 300-metre shoreline area of the lake does
19 not form part of the FMA land base; correct? It is
20 excluded from the FMA?

21 A. I didn't study the Abitibi plan, but
22 I think that is very similar as Domtar's, yes.

23 Q. My point being simply this, that the
24 300-metre shoreline area along the lake has been
25 excluded from the FMA land bases, and I gave you those

1 two as an example, and that the effect of that is that
2 they are not part of the timber management planning
3 process insofar as the FMA holders in those areas are
4 concerned because they are outside of their land base;
5 correct?

6 A. I don't think there is a quarrel who
7 is responsible, but the fact is the area can be
8 harvested worries the Society very much regardless if
9 it is under the forest management agreement or not.

10 Q. I understand and I want to take it in
11 stages.

12 A. Okay.

13 Q. Dealing, first of all, with the FMA
14 holders, the 300-metre shoreline along the lake is not
15 subject to the timber management planning process
16 insofar as the companies are concerned because it
17 doesn't form part, in fact it is specifically excluded
18 from their FMA land base?

19 A. Right.

20 Q. Am I also correct then that in order
21 for any timber activity to take place within the
22 300-metre shoreline--

23 A. Correct.

24 Q. --whether it is harvesting or
25 anything else--

1 A. Correct.

2 Q. --any timber management activity
3 would require, first of all, the full timber management
4 planning process?

5 A. Yes.

6 Q. It would also require, for example,
7 public participation and open houses?

8 A. Yes.

9 Q. It would also require conformity with
10 the MNR's existing guidelines, tourism, recreation,
11 fisheries, all their existing guidelines as applicable?

12 A. Yes.

13 Q. It would also require final Ministry
14 approval?

15 A. Correct.

16 Q. And it also would bear the potential
17 for bump-up?

18 A. Well, obviously, yes.

19 Q. Obviously, yes. So all of that would
20 have to be met and would be triggered before any timber
21 management activity on that shoreline would be
22 permitted?

23 A. That is correct.

24 Q. Then the other issue particular to
25 Lake Nipigon that you spoke about in your evidence to

1 the Board on behalf of the Society concerned what you
2 described as the zone 10 amendment issue.

3 Do you remember you spoke about that?

4 A. Right.

5 Q. All right. Just in an effort to
6 perhaps do this quickly, as I understand the nature of
7 the concern, it was that the Society raised a concern
8 regarding an amendment which had been proposed in the
9 past to zone 10 of the Nipigon District Land Use
10 Guideline; correct?

11 A. Correct.

12 Q. And the nature of the amendment was
13 such that it would have -- let me back up.

14 The guidelines prior to the proposed
15 amendment provided for 120-metre shoreline reserve for
16 designated for canoe routes?

17 A. Canoe routes, yes.

18 Q. Is that correct?

19 A. That's correct.

20 Q. And zone 10 is the same as the
21 Caribou Lake area, as I understand it, under the plan?
22 It is area 10, Caribou Lake?

23 A. Yes, that's the Armstrong management
24 unit.

25 Q. It is the Caribou Lake area within

1 the Armstrong unit?

2 A. That's right.

3 Q. All right. Now --

4 A. Which is under the Domtar licence of
5 course and...

6 Q. Could I ask you to go to Tab 45,
7 please, of the black binder.

8 A. Yes.

9 Q. At Tab 45 is an extract, Mr. Marek,
10 from the Nipigon District Land Use Guidelines,
11 specifically page 54. Do you see that?

12 A. Yes.

13 Q. And it deals with -- this is at Tab
14 45. It deals with Caribou Lake and land use activity
15 for area No. 10 for Caribou Lake?

16 A. That's right.

17 Q. And it provides, if you look to the
18 right-hand side under Guidelines -- do you see that?

19 A. Yes, that's right. I have it.

20 Q. If you look to the fourth item, it is
21 entitled Crown Land Recreation and then there is a
22 description under the guidelines column.

23 Do you see that on the right-hand side
24 beginning: "Existing levels of activity will
25 continue..."

1 A. "Existing levels of activity...."

2 Q. It provides:

3 "A few new access points may be developed

4 as new areas become assessible.

5 Designated canoe routes will have

6 120-metre shoreline reserves."

7 A. That's correct.

8 Q. That's what the guidelines provided?

9 A. That's what they did or they do, yes.

10 Q. They did and they do today?

11 A. Right.

12 Q. And in the next paragraph, it

13 provides with respect to forestry that:

14 "Operating and annual plans will contain

15 specific guidelines for the protection of

16 tourism values and fish and wild life

17 habitat."

18 Correct?

19 A. That's correct.

20 Q. So those were the provisions that

21 applied to area 10, Caribou Lake under the District

22 Land Use Guidelines?

23 A. That's correct.

24 Q. If we look up to the very top of the

25 page under subparagraph (b) entitled Land Use Intent,

1 we see there a description of what the planning
2 intention was for this area; correct?

3 A. Yes.

4 Q. It indicates, does it not, that the
5 primary use for this area would be commercial tourism?

6 A. That's right.

7 Q. And that extractive activities such
8 as timber harvesting, while growing in importance,
9 would remain secondary?

10 A. Correct.

11 MS. CRONK: Madam Chair, could this
12 extract be marked as the next exhibit, please.

13 MADAM CHAIR: Thank you, Ms. Cronk.

14 Do we have the Lake Nipigon District Land
15 Use Guidelines as an exhibit?

16 MS. CRONK: My understanding is the full
17 version is part of the source book provided by the
18 Beardmore Watchdog Society.

19 MADAM CHAIR: You want this one page to
20 be separate?

21 MS. CRONK: Yes.

22 MADAM CHAIR: That will be Exhibit 1578.

23 MS. CRONK: Thank you.

24 ---EXHIBIT NO. 1578: One-page extract from the Nipigon
25 District Land Use Guidelines,
page 54.

1
2 MS. CRONK: Q. Could I ask you now to go
3 to Tab 46 of the black binder, the very next page.

4 At Tab 46, Mr. Marek, is a document
5 consisting of three pages. It is, first, a photocopy
6 of a letter from Art Currie. First of all, I
7 understand that Mr. Currie is the district manager of
8 the MNR in Nipigon?

9 A. He was.

10 Q. He was at the time; that is, June
11 '89? He was in June 1989?

12 A. When he signed this letter that was
13 probably his last letter.

14 Q. His letter is dated June 29, 1989 and
15 it is accompanied by a public notice?

16 A. That's correct.

17 Q. And the notice relates to the
18 proposed amendment to the area 10 land use provisions
19 as set out in the guideline?

20 A. That's correct.

21 Q. And the third page is a fact sheet
22 relating to the proposed amendment?

23 A. That's right.

24 MS. CRONK: Could that be marked, Madam
25 Chair, as the next exhibit.

1 MS. SWENARCHUK: It is an exhibit, as you
2 see, in the beginning -- the first page, Ms. Cronk. It
3 is Exhibit 780.

4 MS. CRONK: Thank you. All three pages,
5 Ms. Swenarchuk?

6 MS. SWENARCHUK: I believe so.

7 MS. CRONK: Thank you. I had missed
8 that. That's fine it is already an exhibit, Madam
9 Chair.

10 Q. Mr. Marek, could I ask you to go to
11 page 3 of the fact sheet?

12 A. Fact sheet?

13 Q. Yes.

14 A. Correct.

15 MS. CRONK: Ms. Swenarchuk informs me it
16 is already an exhibit.

17 MS. SWENARCHUK: I will check that over
18 lunch.

19 MADAM CHAIR: Thank God something is an
20 exhibit already.

21 MS. CRONK: Q. You have the fact sheet,
22 Mr. Marek, the third page?

23 A. I have the fact sheet.

24 Q. Still dealing with the amendment, the
25 first page describes the nature of the proposed

1 amendment?

2 A. Yes.

3 Q. The second paragraph describes the
4 background?

5 A. Background and the proposal.

6 Q. All right. Just dealing with the
7 background, am I correct that at the time that the
8 reserve was put in place for these canoe routes in area
9 10, at that point in time the MNR's current timber
10 management planning process was not in place?

11 That came in the mid 1980's with the new
12 Timber Management Planning Manual?

13 A. That was old plan there. Would you
14 repeat it again?

15 Q. Yes. The MNR's timber management
16 planning manual and the process that it requires were
17 introduced after the guideline? The guidelines came in
18 place in 1983.

19 A. '83.

20 Q. And the manual in 1985 and the
21 amendment in 1986?

22 A. That's right.

23 Q. My point being, that the current MNR
24 planning process was not in place at the time these
25 guidelines were prepared; correct?

1 A. That is correct.

2 Q. Further, the MNR's guidelines with
3 respect to tourism values, fisheries values --

4 A. Were not there either.

5 Q. None of those were in place?

6 A. Correct.

7 Q. So at the time that the land use
8 guidelines were put in place in 1983, what was done wa
9 a reserve was created to the extent of 120 metres for
10 these canoe routes?

11 A. That's correct.

12 Q. Then, according to the fact sheet in
13 the background section, Mr. Marek, that Mr. Currie
14 provided, it is indicated that:

15 "The reserve was placed on the canoe
16 routes to be consistent with the primary
17 land use intent of the area and the fact
18 that in 1983 there were no other approval
19 guidelines to protect these values."

20 He is confirming what you have just
21 indicated?

22 A. Yes.

23 Q. Then the next paragraph goes on to
24 describe what the nature of the proposal is and it is
25 indicated:

1 "The Ministry of Natural Resources
2 proposes to actively manage the canoe
3 routes in zone 10. By using approved
4 guidelines in particular tourism, the
5 Ministry proposes a consultative
6 approach to produce variable dimension
7 reserves which will provide maximum
8 protection for the canoe routes."

9 A. I'm aware of that, Madam.

10 Q. That was the stated purpose of the
11 amendment?

12 A. That's right.

13 Q. All right. Is it not possible then,
14 Mr. Marek, looking at this background and this history
15 that the purpose of the amendment, the proposed
16 amendment was to bring in those 120-metre reserve areas
17 into the current timber management planning process of
18 the MNR?

19 A. And the timber production.

20 Q. Insofar as that was part of it, it
21 was to bring it into the process?

22 A. In timber production.

23 Q. To make it subject to the timber
24 management planning manual and all the processes that
25 goes with that?

1 A. Correct.

2 Q. Including the tourism guidelines, the
3 fisheries guidelines and the like?

4 MS. SWENARCHUK: Excuse me, but frankly
5 this is not a subject in which the witness can have any
6 personal knowledge. The question goes to the
7 motivation of the Ministry and that is perhaps
8 information that can only be provided by the Ministry
9 itself.

10 MS. CRONK: Madam Chair, in my respectful
11 submission that isn't the case. The witness has
12 indicated what his understanding was of the purpose of
13 the amendment, and I am showing him through what is
14 Exhibit 780 what factual information was available to
15 persons like the Beardmore Society at the time the
16 amendment was proposed.

17 MADAM CHAIR: Mr. Marek is telling us his
18 opinion is the same.

19 MS. CRONK: Exactly. Thank you.

20 MS. SWENARCHUK: As qualified.

21 MADAM CHAIR: Pardon me?

22 MS. SWENARCHUK: As qualified.

23 MS. CRONK: Q. Mr. Marek, then just to
24 finish up this area. What I am really suggesting to
25 you, sir, is that rather than any ulterior motive for

1 timber production, is it not equally possible that the
2 only proposed purpose of the amendment was to ensure
3 that those areas affected by the reserve were managed
4 in accordance with current MNR guidelines on tourism,
5 fisheries, recreation, et cetera? Isn't that possible?

6 A. Not according to the Society which I
7 represent, Madam Chair.

8 Q. I understand that. But I am
9 suggesting to you that in light of the documentation
10 that I have now brought to your attention and
11 recognizing the point in time at which the reserves
12 were introduced in 1983 it is possible that was the
13 case?

14 A. Madam Chair, the Beardmore Society is
15 fully aware of these documents which Ms. Cronk
16 presented here, and for one reason or many reasons they
17 do not agree that this amendment can replace the
18 agreements which were negotiated three, four years ago.

19 They feel strongly that this was strictly
20 timber motivated because Domtar was trying to reach
21 certain allowable cut in the area. They believe
22 strongly that it was strictly timber motivated in order
23 to get these reserves into the productive forest land
24 because they were outside of it. They object to it.

25 Madam Chair, I can just relate what

1 people is telling me and that is that they feel that
2 the management of Lake Nipigon shorelines will not be
3 properly protected under these amendments.

4 Q. I understand the position of the
5 Society, Mr. Marek.

6 A. Yes.

7 Q. I understand, and please correct me
8 if I am wrong, that for the reasons you have described
9 it was their preference that no amendment go forward,
10 they did not want those amendments to be made?

11 A. That is correct.

12 Q. What I am saying to you, sir, as
13 their spokesman here today--

14 A. Yes.

15 Q. --rather than ascribing some ulterior
16 motive to the introduction of that amendment, given
17 what you have looked at today, isn't it at least
18 possible that it was intended to do nothing but bring
19 those reserve areas in the modern management process
20 introduced by the MNR including its guidelines?

21 A. What do you mean by "modern
22 management"?

23 Q. The timber management planning
24 process and the MNR's guidelines for tourism,
25 recreation and fisheries?

1 A. Is that "modern"?

2 Q. That's what I meant.

3 A. I see.

4 Q. Is that not at least possible?

5 A. If I put that to my --

6 Q. I am asking you as the spokesman,
7 sir, standing here today --

8 A. I cannot speak for them unless I ask
9 them, Madam

10 Q. I see. So your evidence today with
11 respect to the Beardmore statement is your
12 understanding of what they think?

13 A. Madam, when I prepared this report
14 for Beardmore Society I took this with the
15 understanding that the majority of the Society would
16 exercise their wishes and I represent their wishes.

17 Now, when you talk to me as a
18 professional forester or talk to me as consultant for
19 OFAH or Industry, that will be completely different
20 story. I represent Beardmore Society which disagrees
21 strongly with amendments for reasons I suggested.

22 Q. As their spokesman you would prefer
23 not to respond to the possibility that I am putting to
24 you?

25 A. I don't think I should.

1 Q. I see. Could I ask you to go to Tab
2 47, please. Am I correct, Mr. Marek, ultimately the
3 amendment was rejected by the Ministry of Natural
4 Resources?

5 A. That is correct.

6 Q. And that this letter which is appears
7 at Tab 47 confirms that the amendment was denied?

8 A. That is correct. I'm saying now, but
9 I -- you know. Yes, they rejected the proposed
10 amendment, correct.

11 MS. CRONK: Madam Chair, could this be
12 the next exhibit, please.

13 MADAM CHAIR: This will be Exhibit 1579.
14 Would you describe that, please, Ms. Cronk.

15 MS. CRONK: Yes. It is a letter dated
16 October 18, 1989 from the then district manager of the
17 Nipigon District, Mr. Currie, confirming that the
18 proposed amount to amendment to zone 10 was rejected.

19 THE WITNESS: Mr. Currie was gone
20 already.

21 ---EXHIBIT NO. 1579: Letter dated October 18, 1989
22 from the then district manager of
23 the Nipigon District, Mr. Currie,
24 confirming that the proposed
amount to amendment to zone 10
was rejected.

25 MS. CRONK: Madam Chair, I have about 10

1 minutes left, 15 minutes left to my cross-examination
2 and then I will be complete. I recognize that we
3 started a little later this morning, but it is also
4 afternoon.

5 What is the Board's pleasure with respect
6 to the luncheon break?

7 ---Discussion off the record

8 MADAM CHAIR: All right, Ms. Cronk, why
9 don't we finish now. You should be finished by quarter
10 after?

11 MS. CRONK: We certainly hope to do that.

12 Q. One of the other areas you discussed
13 with the Board related to the Beardmore Society's
14 evidence concerning how meaningful, if I can put it
15 that way, open houses were and the public providing
16 input into the timber management plan.

17 Do you recall that general area?

18 A. That is correct.

19 Q. Could I ask you to go in the
20 Beardmore statement to page 11.

21 A. Correct.

22 Q. First of all, Mr. Marek, did you
23 author this statement? Do you write it?

24 A. I have written it, yes, with the
25 approval of the Society.

1 Q. Yes. At page 11 then in the first
2 paragraph, the last sentence, you are talking in this
3 paragraph about amendments to timber management plans?

4 A. That is correct.

5 Q. And you are indicating with respect
6 to amendments the suggestion, at least the allegation
7 is made that:

8 "Amendments are made primarily to
9 accomodate the forest Industry's need for
10 wood or a new road or the mining
11 industries need to explore at will."

12 Do you see that?

13 A. That is correct.

14 Q. You then go on to say:

15 ""I cannot remember seeing an
16 amendment to a plan which would afford
17 greater protection or conservation of
18 some values."

19 A. Right.

20 Q. That, I take it, is your opinion?

21 A. That is the opinion of the Society
22 and I share this opinion with them.

23 Q. Could I ask you to go back to the
24 preceding page, page 10. In the middle of the page it
25 is suggested:

1 "While with some public input is
2 reflected in plans..."

3 A. Yes.

4 Q. You are talking about timber
5 management plans again?

6 A. That's correct.

7 Q. "It is very difficult for the public
8 to effect fundamental changes against the
9 wishes of industry and sometimes the
10 OMNR."

11 A. That's right.

12 Q. Stopping there, Mr. Marek. Would you
13 agree with me that there are examples of many
14 amendments introduced to timber management plans, the
15 sole purpose of which was to accommodate issues raised
16 by the public or to accommodate values other than
17 timber production?

18 There are many examples of that?

19 A. That may be the case across the
20 board, Madam, and I'm talking about across the board.
21 I'm talking about Ontario as a province, but in area
22 north like Beardmore this is usually not the case.
23 There were some. I probably could even put a number to
24 it.

25 Q. You said for example, Mr. Marek, on

1 behalf of the Society that:

2 "You cannot remember seeing an amendment
3 to a plan which would afford
4 greater protection or conservation of
5 some values."

6 A. That's correct.

7 Q. What I am saying to you, sir, with
8 respect, that's quite an over-statement?

9 What I am suggesting to you is there are
10 many examples, even in your own area of the north,
11 where amendments have specifically been introduced to
12 accommodate other values and input from the public?
13 Now, isn't that fair?

14 A. No, that's not fair at all, Madam.
15 The reason it was put in here after serious discussion
16 were, as a matter of fact, the same subject as you just
17 suggested was discussed, and most of the members stated
18 indeed that the hierarchy or priorities always been the
19 timber production.

20 I just have to disagree when you try to
21 say that it was otherwise motivated.

22 Q. Could I ask you to go, please, if you
23 would, to Tab 48 in the black binder.

24 A. Correct.

25 Q. You are familiar, I take it, with the

1 Domtar/Armstrong Management Unit Timber Management
2 Plan. That's from part of the world that you are
3 familiar with?

4 A. That's correct.

5 Q. And what appears at Tab 48 is the
6 cover page of the signed version of that plan. Do you
7 see that?

8 A. Yes.

9 Q. I would ask you to go to the second
10 page of the extract which sets out in a listed way
11 amendments made during the period April 1, 1985 to
12 March 31, 1990 for that plan?

13 A. Yes.

14 Q. Do you see that?

15 A. Yes.

16 Q. Looking down at the second paragraph,
17 am I correct that it sets out a list describing the
18 amendments that were approved during that period?

19 A. That's correct.

20 Q. All right. There are eight in total,
21 Mr. Marek, if you could just count them up.

22 A. Yes.

23 Q. I am going to ask you, for example,
24 to take a look at the fifth one, for example, down. It
25 is an amendment in 1988 and the description is that it

1 was the addition of moose areas of concern.

2 Do you see that?

3 A. That was addition of moose AOC?

4 Q. Yes. Do you see that?

5 A. That's correct.

6 Q. That suggests an amendment was

7 introduced in 1988--

8 A. That's correct.

9 Q. --to this plan for purpose; correct?

10 A. That's correct.

11 Q. You would agree with me that that's a

12 value other than timber production? Areas of concern

13 for moose, obviously, are matters other than -- values

14 other than timber production?

15 A. That's correct.

16 Q. And looking down further at the other

17 amendments that were made, we find in 1989 the same

18 kind of amendment being made for the addition of moose

19 areas of concern. Do you see that, second from the

20 bottom?

21 A. That's not for the Armstrong, but
22 yes, that's correct.

23 Q. Then looking down at the last one in

24 1989--

25 A. Okay.

1 Q. --brought forward by a group called
2 the Mattice Lake Outfitters. Do you see that?

3 A. Yes.

4 Q. That suggests an amendment was made
5 at the instigation of that group for a concern that was
6 specifically theirs?

7 A. That is correct.

8 MS. CRONK: Could that be marked as the
9 next exhibit, Madam Chair, please.

10 MADAM CHAIR: That's Exhibit 1580.

11 ---EXHIBIT NO. 1580: Extract from the Domtar/Armstrong
12 Management Unit Timber Management
13 Plan which sets out amendments
made during the period April 1,
1985 to March 31, 1990.

14 MS. CRONK: Q. Turning to the next tab,
15 Tab 49, this is, I am informed, an extract from the
16 current draft plan?

17 A. Current draft, yes.

18 Q. Timber management plan for the Lake
19 Nipigon Forest. That's the Lake Nipigon FMA of Domtar?

20 A. That is correct.

21 Q. That's the timber management plan
22 that governs the area where you live?

23 A. It is not governed as yet, but it
24 will govern.

25 Q. It governs -- it will govern the area

1 where you live in Beardmore?

2 A. That is correct.

3 Q. If you look over to the second,
4 third, fourth and fifth pages attached to this extract,
5 it sets out again in a listing way; that is, one after
6 the other, the amendments made to the 1986-1991
7 operating plan?

8 A. Correct.

9 Q. Would you agree with me, just take a
10 look at the first one, for example, that was an
11 amendment approved on July 29, 1986 for removal of
12 residual balsam poplar?

13 A. That is correct.

14 Q. That is the kind of thing you told
15 the Board should be done, that balsam on poplar should
16 be removed; correct?

17 A. I wonder if this is correct here.
18 Removal of residual...

19 Q. Excuse me, Mr. Marek. Isn't the
20 removal of that kind of balsam exactly what you told
21 the Board should be done?

22 A. No, I was not talking about balsam
23 poplar.

24 Q. All right.

25 A. I was talking about trembling aspen,

1 Madam.

2 Q. I see. Did you not also say that
3 balsam fir should be harvested?

4 A. Should be harvested whenever attacked
5 by budworm, yes.

6 Q. Take a look at the second type of
7 amendment, that was for the salvage of 872 hectares of
8 blowdown by the Red Rock Indian Band?

9 A. Which was not done.

10 Q. Are you saying, sir, that the
11 activities described in that amendment were not carried
12 out?

13 A. Partially.

14 Q. Yes, thank you. Taking a look at the
15 third, there is a clean-up at McNight Lake, block cuts
16 for whole tree chipper? Do you see that on October 15?

17 A. I see that here.

18 Q. The fourth amendment was related to
19 another salvage, budworm damaged balsam fir?

20 A. That's correct.

21 Q. Going over to the next page -- again
22 salvage operations are something that you suggested in
23 your evidence to the Board should be done?

24 A. That's correct.

25 Q. Then over on the next page, page 2,

1 if you look down at the third one down, again in an
2 effort to complete this quickly, Mr. Marek, rather than
3 going through each one of them, take a look at the
4 third one, for example, August 25, 1988.

5 Do you see that?

6 A. "...for implementation of moose
7 management guidelines throughout the
8 additional wildlife corridors."

9 Q. That's an amendment specifically for
10 a value other than timber production?

11 A. Which is not recognized by public as
12 a value.

13 Q. I beg your pardon, sir?

14 A. Which is not necessarily recognized
15 as a value in the eyes of the public.

16 Q. Just a minute. Mr. Marek, what I am
17 suggesting to you is the amendment introduced to the
18 plan as reflected in this list was for a value other
19 than timber production? You would agree?

20 A. That is correct.

21 Q. All right. What you are saying to me
22 is some people may not regard that as a value?

23 A. That's correct.

24 Q. You acknowledge that some people, of
25 course, do?

1 A. Some do, yes.

2 Q. The Ministry of Natural Resources
3 clearly does in its planning process; correct?

4 A. Well, whatever.

5 Q. Not whatever. Is that correct or do
6 you know?

7 A. Are you trying to ask me to cite
8 you --

9 Q. No. I am asking you if it is your
10 understanding that the Ministry of Natural Resources
11 regards that as a value to be protected?

12 A. As the Ministry is concerned, yes.

13 Q. Thank you. Looking at the amendment
14 at the bottom of that page, July 14, 1988, that was an
15 amendment made to include additional areas in operating
16 plans and new areas of concern around lakes.

17 Do you see that?

18 A. Yes, I see that there.

19 Q. You would agree with me that that
20 kind of amendment is intended to protect a value
21 other than timber production?

22 A. The intent is there, yes.

23 Q. Yes. Just dealing with that one, the
24 one before that for Moose Management Guidelines, could
25 I ask you -- Madam Chair, did we mark this as an

1 exhibit?

2 MADAM CHAIR: No, we haven't yet. It
3 will be Exhibit 1581.

4 MS. CRONK: Thank you, Madam Chair.

5 ---EXHIBIT NO. 1581: Extract from the Lake Nipigon FMA
6 Timber Management Plan which sets
out amendments to the plan.

7 MS. CRONK: Q. Could I ask you to go
8 tab 50, Mr. Marek. Do you remember seeing that tab 50?

9 A. Yes.

10 Q. At tab 50, I am going to suggest to
11 you that this is further documentation by way of
12 example relating to the amendments described in the
13 previous exhibit as having been approved on August 25,
14 1988, the purpose of which to provide for the
15 implementation of moose management guidelines through the
16 addition of wildlife corridors?

17 A. Yes.

18 Q. Would you agree with me that the
19 document at tab 50, first of all, the date at the
20 bottom page is August 25, 1988?

21 A. I'm fully aware of that document,
22 Madam.

23 Q. Thank you, that's helpful. Would you
24 agree with me the date at the bottom of the page is
25 August 25, 1988?

1 A. Yes.

2 Q. It deals with amendment to the plan
3 for the purpose of implementing moose management
4 guidelines in timber harvesting operations?

5 A. That is correct.

6 Q. It provides for the addition of
7 wildlife corridors for current operating plans?

8 A. Yes.

9 Q. What I'm suggesting to you, Mr.
10 Marek, from these documents is if we go through the
11 nature of these amendments it is quite clear that a
12 number of amendments have been made not just to plans
13 generally in the province, but specifically to the plan
14 in the area with which you are familiar for the
15 expressed purpose of either responding to publicly
16 identified concerns or issues or to protect values
17 other than timber production.

18 Isn't that case?

19 A. That's the case here.

20 Q. Thank you. Then one final -- I'm
21 sorry, Madam Chair, could we mark the document at tab
22 50, please.

23 MADAM CHAIR: Exhibit 1582. That's a
24 three page document, Ms. Cronk?

25 MS. CRONK: Yes, it is, Madam Chair. The

1 preceding one, Exhibit 1581, is five pages.

2 ---EXHIBIT NO. 1582: Document dated August 25,
3 1988 re amendments for the
4 purpose of implementing moose
management guidelines in timber
harvesting operations.

5 MS. CRONK: Q. Now, Mr. Marek, one of
6 the things that we have talked about in our discussion
7 together and that you have indicated to the Board in
8 your evidence is that you regard it as desirable for
9 plan authors to have one-on-one dialogue with members
10 of the public who have issues that they wish raised.

11 You recall we talked about that?

12 A. Yes, we did.

13 Q. You regard that as desirable thing to
14 occur?

15 A. Yes.

16 Q. Could I ask you to look at the last
17 document in the book, Tab 51, please. This comprises
18 two letters. One from Quentin Day, Assistant District
19 Manager for Nipigon -- or is that acting? I don't want
20 to be unfair to Mr. Day. It is acting or assistant?

21 A. Acting.

22 Q. Acting District Manager for Nipigon
23 dated October, 19, 1990 addressed to the President of
24 the Beardmore-Lake Nipigon Society together with a
25 further letter dated November 13, 1990 again from Mr.

1 Day, President of Beardmore-Lake Nipigon Watchdog
2 Society.

3 These letters, as I understand it, first
4 extend an invitation to the Society to meet with the
5 authors of five different timber management plans to
6 discuss the plans now being written for areas around
7 Lake Nipigon?

8 A. That's right.

9 Q. And the second letter confirms that
10 that meeting was scheduled to be held on November the
11 15th, last week, between representatives of the Society
12 and the actual plan authors and their representatives
13 for each of those five plans?

14 A. Yes, they have met.

15 Q. And does this kind of proposed and
16 carried out meeting reflect the kind of one-on-one
17 dialogue that you think is desirable?

18 A. Correct.

19 Q. Thank you. Now, Mr. Marek, generally
20 during the course of your evidence you have talked
21 about aspen proliferation and described to the Board
22 the circumstances in which you think that occurs, and
23 the Board will recall that among the documents that has
24 been marked as an exhibit are the document that appear
25 at Tab 12 of Exhibit 1546.

1 MADAM CHAIR: The last was Exhibit 1583,
2 Ms. Cronk, the correspondence in October and November
3 of this year.

4 MS. CRONK: Thank you. I'm sorry.

5 MADAM CHAIR: That's two pages?

6 MS. CRONK: Yes, thank you.

7 MS. SWENARCHUK: 1583, Madam Chair?

8 MADAM CHAIR: 1583, yes.

9 ---EXHIBIT NO. 1583: Letter from Quentin Day, acting
10 District Manager for Nipigon
11 dated October, 19, 1990 addressed
12 to the President of the
13 Beardmore-Lake Nipigon Society,
14 together with a letter dated
November 13, 1990 from Mr.
Day, President of the
Beardmore-Lake Nipigon Watchdog
Society.

15 MS. CRONK: Mr. Marek, you will recall
16 that throughout your evidence you have described to the
17 Board what you have said is a situation of aspen
18 proliferation in the area of the undertaking?

19 A. The capture of trembling aspen of the
20 cut-over sites, correct.

21 Q. Yes, you have talked about that.

22 MS. CRONK: The Board will recall that
23 among the documents that have been marked as an exhibit
24 are a series of extracts from various articles at Tab
25 12 that were marked as Exhibit 1546.

1 I don't propose to go through those
2 articles. We have Mr. Marek's evidence about that and
3 I will be making argument at the end of the day at some
4 point to the Board about this.

5 Q. Mr. Marek, could I simply understand
6 your evidence on this aspect of the matter. Would you
7 agree with me that there are circumstances in the
8 boreal forest where aspen is not a competitor, but
9 rather a desirable species?

10 A. If you want to harvest poplar, yes.

11 Q. Exactly. There are areas where it is
12 the objective to harvest and utilize poplar and in
13 those circumstances clearly it should not be regarded
14 as a competitor, but rather the desired crop species?

15 A. Well, if you revert -- or if you
16 convert black spruce into poplar or aspen
17 intentionally; in other words, the prescription is
18 there to do so, yes.

19 Q. With or without conversion, there are
20 companies that utilize poplar, for example, in chipping
21 operations?

22 A. Correct.

23 Q. Domtar in Red Rock is an example of a
24 company that utilizes poplar in that regard?

25 A. Again, I don't want to quantify the

1 volumes and numbers but, yes, they do.

2 Q. Yes, exactly. Now, Mr. Marek, you
3 have given evidence about what your view is about how
4 aspen should be treated, about its harvesting.

5 You have said in your exchange with Mr.
6 Hanna, for example, that windrowing of poplar was
7 unacceptable. That was your evidence? Do you recall
8 that?

9 A. Windrowing?

10 Q. Windrowing, yes.

11 A. Wind?

12 Q. Windrowing was an acceptable
13 technique? Do you recall telling Mr. Hanna that?

14 A. In what context, Madam?

15 Q. In the context of exploring methods
16 of site preparation you told Mr. Hanna that windrowing
17 was "one of the worse forms of site preparation you had
18 seen"?

19 A. I didn't say poplar.

20 Q. You said windrowing?

21 A. Madam, you are confusing matter
22 considerably. You are talking about poplar management
23 and you are talking about windrowing.

24 So let's be clear what we are talking
25 about. Are we talk just windrowing period; in other

1 words, scraping the forest floor and putting the debris
2 and humus on both sites?

3 Q. Let's talk about windrowing of
4 poplar. Would you agree with me, Mr. Marek --

5 A. Madam, we didn't talk about
6 windrowing of poplar.

7 Q. We are now, sir. I am raising it
8 with you now.

9 Would you agree with me that contrary to
10 the suggestion that windrowing is one of the worse
11 forms of site preparation available that in some
12 circumstances the use of windrowing techniques, for
13 example, windrowing of poplar is an appropriate
14 technique?

15 A. Windrowing of poplar.

16 Q. Are you familiar with the use of that
17 technique for dealing with poplar in the area of the
18 undertaking?

19 A. Well, they use it in many areas like
20 Alberta. They are windrowing poplar because they have
21 problem with many other things there. However, when we
22 talk about windrowing of poplar in northern Ontario I
23 am not too familiar with that windrowing of poplar.

24 Q. All right, that's helpful.

25 A. Poplar cut-overs?

1 Q.... Thank you, sir. Given that you are
2 not too familiar with the use of that technique in
3 Ontario, I take it you would not want the Board to
4 conclude that you were passing judgment on the
5 appropriateness of that as a technique in the boreal
6 forest?

7 A. In any moment I am not aware talking
8 about windrowing of poplar in my presentation, Madam,
9 I'm sorry. You bring the case here where I stated it
10 and I will deal with it, but you didn't.

11 Q. Let me be clear, Mr. Marek, so there
12 is no confusion. You talked about windrowing --

13 A. Generally.

14 Q. I understand. Now, I am putting the
15 issue of windrowing of poplar to you and because you
16 are not familiar with it, you just said, I take it it
17 would be inappropriate, wrong of us to conclude that
18 you were passing judgment on the windrowing of poplar
19 as a technique in the boreal forest. You weren't doing
20 that?

21 A. Windrowing of poplar in the boreal
22 forest.

23 Q. You weren't doing that? You weren't
24 passing judgment on that; am I right?

25 A. I still don't know what you are

1 talking about, Madam. I'm sorry, but I don't know what
2 you are talking about.

3 Q. Let me just ask you this. Mr. Marek,
4 you suggested that forest managers are poorly equipped
5 to deal with what you said was an aspen proliferation
6 problem in the boreal forest?

7 A. Correct.

8 Q. You suggested that this was a new
9 problem that was going to be with us for a long time?

10 A. Correct.

11 Q. And that forest managers didn't have
12 the techniques to deal with that? That's your opinion?

13 A. Correct.

14 Q. Were you present, sir, in the hearing
15 room before the Board when representatives of E.B. Eddy
16 Forest Products Limited gave their evidence concerning
17 their management of poplar in their area of the world?

18 A. No, I was not.

19 Q. Did you read the transcripts of their
20 evidence?

21 A. I think I did.

22 Q. You did. Do you recall then
23 specifically the evidence that was given by E.B. Eddy
24 Forest Products Limited representatives concerning
25 their practice of eliminating all residual aspen prior

1 to planting?

2 A. Correct.

3 Q. You recall that evidence?

4 A. No, I was not here.

5 Q. You don't recall that evidence?

6 A. I was not at the presentation.

7 Q. Fine. I take it --

8 A. But I read in transcripts.

9 Q. I take it then you were not in the
10 course of your evidence expressing an opinion on the
11 desirability, one way or another, of the kinds of
12 poplar control techniques employed by E.B. Eddy?

13 A. No.

14 Q. You were not?

15 A. No.

16 Q. Similarly then, your evidence should
17 not be interpreted as expressing an opinion on the
18 merits or desirability of the windrowing of poplar?

19 A. Madam --

20 Q. Am I correct in that?

21 A. No, no, I have to defend this because
22 I'm dealing with black spruce management. My testimony
23 is to the black spruce management. I didn't get never
24 or attempted to get involved in discussion of poplar
25 management.

1 Q. Thank you, that's fine. I put it
2 badly, but that's the question I was really asking you.

3 A. Oh, yes.

4 Q. That's fine. So your comments with
5 respect to windrowing were narrow, they dealt with
6 black spruce?

7 A. And in context of boreal forest which
8 deal with primary species like black spruce.

9 Q. Yes. And they did not deal with the
10 kinds of techniques utilized by companies like E.B.
11 Eddy?

12 A. Like E.B. Eddy?

13 Q. Yes.

14 A. No.

15 Q. Thank you. Now, Mr. Marek, we spoke
16 on Thursday afternoon about the kinds of practices
17 currently employed by Industry foresters and government
18 foresters in the boreal forest, and I think you agreed
19 with me that whatever the management system there is
20 always room for improvement, whatever the management
21 system?

22 A. Without doubt.

23 Q. Yes. And you spoke with me Thursday
24 afternoon about what you termed the pursuit of
25 excellence. Do you recall that?

1 A. Without a doubt, Madam.

2 Q. Would you agree with me that there is
3 nothing unique about forestry when one comes to look at
4 ways in which to improve the management system?

5 A. Correct.

6 Q. Would you also agree with me that
7 there are many ways to achieve professional excellence
8 in forestry?

9 A. No, I think there is only one
10 excellence.

11 Q. I see. And that's the excellence
12 that you defined for the Board?

13 A. I wouldn't claim that. I never said
14 that.

15 Q. I am suggesting to you, sir, that
16 there are many ways to go about achieving excellence in
17 forestry. Would you agree with that? There is not one
18 route?

19 A. There is one excellence in forestry,
20 Madam.

21 Q. But there are many ways to achieved
22 it? There is not only one way to achieve it, there are
23 many?

24 A. I suppose.

25 Q. You agree. The way that you have

1 described to the Board maybe appropriate in some
2 situations, but not in all. Would you agree?

3 A. I would be too arrogant to say that
4 my knowledge apply to all the globe or for all spectrum
5 of the world, no. I have certain experience in black
6 spruce and I think that's what I defended here.

7 Q. And nor do you say that it should
8 apply universally throughout the boreal forest?

9 A. To the area to which my statement is
10 made, yes.

11 MS. CRONK: I think I will leave it
12 there, Madam Chair.

13 Mr. Marek, thank you.

14 Madam Chair, Mr. Martel, those are my
15 questions.

16 MADAM CHAIR: Thank you, Ms. Cronk.

17 THE WITNESS: Thank you, Ma'am.

18 MS. CRONK: Thank you, Mr. Marek.

19 MADAM CHAIR: We will break for lunch
20 now, Mr. Marek, and we will return to hear from Ms.
21 Seaborn.

22 MS. SEABORN: Yes, Madam Chair.

23 MADAM CHAIR: We will return this
24 afternoon at quarter to two.

25 MS. CRONK: Thank you.

1 ---Luncheon recess taken at 12:30 p.m.

2 ---On resuming at 1:45 p.m.

3 MADAM CHAIR: Good afternoon. Please be
4 seated.

5 Mr. Marek?

6 THE WITNESS: Madam Chair, before we
7 continue, could I clarify that last issue before the
8 break dealing with the poplar because obviously the
9 counsel didn't know what I was thinking or she didn't
10 know...

11 MADAM CHAIR: Why don't we take this up
12 in re-examination, Ms. Swenarchuk, because over the
13 next few counsel who cross-examine you this issue may
14 come up again, and if it doesn't we will take care of
15 it at the end.

16 THE WITNESS: I didn't like to see
17 confusion on that issue because over lunch I find out
18 what she was talking about.

19 MADAM CHAIR: Okay.

20 Ms. Seaborn.

21 MS. SEABORN: Thank you, Madam Chair.

22 Good afternoon, Mr. Martel, Mr. Marek.

23 I would like to begin, Madam Chair, and
24 file a number of interrogatories and these are MOE
25 interrogatories in relation to FFT witness statement

1 No. 3 and in relation to the Beardmore-Lake Nipigon
2 Watchdog Society witness statement.

3 The document is six pages long and the
4 questions are MOE questions No. 1 through 12 in
5 relation to Panel 3 and questions 1 through 5 in
6 relation to the Beardmore-Lake Nipigon Watchdog
7 Society.

8 MADAM CHAIR: All right. That will be
9 Exhibit 1584.

10 ---EXHIBIT NO. 1584: MOE interrogatory question Nos.
11 1-12 (Panel 3) and questions
12 1-5 in relation to the
Beardmore-Lake Nipigon Watchdog
Society.

13 CROSS-EXAMINATION BY MS. SEABORN:

14 Q. Mr. Marek, based on my review of your
15 CV and the publications that you have authored and your
16 evidence in front of the Board to date it is clear that
17 you have had a considerable amount of forestry
18 experience.

19 Would it be fair to say that a great bulk
20 of your research was done and a number of your
21 publications were completed while you were employed by
22 the Ministry of Natural Resources?

23 A. With the Lands and Forests and MNR,
24 yes.

25 Q. Okay. And is it fair to say that

1 much of your research was done at the request of or on
2 behalf of the Ministry of Natural Resources as opposed
3 to --

4 A. Majority, yes.

5 Q. Okay. As opposed to your current job
6 as a consultant?

7 A. I have conducted some research during
8 my employment with the MNR Lands and Forests on my own.

9 Q. I see.

10 A. Or in connection with some of the
11 researchers from CFS or from universities and so on.

12 Q. Right. But in the context of a
13 number of the publications that you authored that are
14 in the source book, a number of these reports were
15 prepared for the Ministry of Natural Resources?

16 A. Yes.

17 Q. Okay. And would it be fair to say
18 that in preparing many of your reports you were not
19 confined to your own management unit?

20 A. That is correct.

21 Q. And you have clearly travelled across
22 the province to gather information for the presentation
23 before the Board last week?

24 A. Yes.

25 Q. Now, Mr. Marek, I want to begin by

1 dealing with the topic of water yield, and in your
2 witness statement you explain that you're concerned
3 about water yields after harvest; is that correct?

4 A. That is correct, Madam.

5 Q. And specifically you have expressed
6 concern about moisture surpluses in the Clay Belt and
7 on the occasional lowlands in the northcentral and
8 northwestern regions?

9 A. Moisture surpluses and deficiencies.

10 Q. Okay. And your witness statement
11 explains that rising and declining water tables result
12 in effects that ultimately hinders the ability of black
13 spruce to renew?

14 A. On certain sites it does.

15 Q. Okay. And, Mr. Marek, the Board has
16 been presented with some evidence in relation to the
17 annual area not regenerated due to increased water
18 yield, and I would like to have a look at Exhibit 136
19 which is the Forest Production Policy Options for
20 Ontario, 1972.

21 There is one page in that report, Mr.
22 Marek, I would like you to look at.

23 Does the Board have a copy of that
24 exhibit?

25 MADAM CHAIR: Yes, we do.

1 MS. SEABORN: Q. Mr. Marek --

2 A. April 1972?

3 Q. Yes.

4 A. That's correct.

5 Q. Could you turn to page 65.

6 A. There is two pages, but I suppose
7 that's the one with the statistics?

8 Q. Yes. That appears at page 65 of the
9 exhibit.

10 A. Yes, I cannot read it here, Madam.
11 Oh, 65 here, that's correct.

12 MADAM CHAIR: Is that Table 22?

13 MS. SEABORN: Mine doesn't have a table
14 number, Madam Chair. It is entitled Assessment of
15 Cut-over and Regeneration by Regions, Crown Land, Areas
16 in Acres.

17 MADAM CHAIR: Is this Exhibit 156?

18 MS. SEABORN: 136. Sorry, Madam Chair.

19 MADAM CHAIR: Okay. Page 65?

20 MS. SEABORN: Yes.

21 Q. Now, Mr. Marek, based on data that
22 was compiled in the last 60's and presented in 1970,
23 the estimate of the annual area not regenerated due to
24 increased water yield is listed as one per cent for
25 both the northwest and northeast regions?

1 A. That's correct.

2 MR. FREIDIN: It says water level.

3 MS. SEABORN: Increased water level, yes.

4 THE WITNESS: Increased water level, yes.

5 MS. SEABORN: Q. Would you make a
6 distinction between increased water yield and increased
7 water level?

8 A. Yes because increase water yield
9 encompasses perhaps much larger area where the site
10 condition, specific site condition area would have a
11 water increase.

12 Q. So an increased water level in your
13 view would be a smaller area as compared to
14 increased -- had that said increased water yield?

15 A. That is correct. Well, again, it's
16 so site specific, Madam.

17 Q. Okay. Now, would you have, Mr.
18 Marek, any information to disagree with this figure of
19 one per cent for the northeast and northwest regions?

20 A. Well, considering that the data is
21 showing one percentage of areas involved, I personally
22 feel, just inspecting the areas and seeing the general
23 cross-section, that's probably the minute, very minute
24 percentage, one per cent.

25 In other words, what I'm saying, Madam,

1 is that probably I would recommend to take a second
2 look at these percentages in 1970 and perhaps we can
3 find there is much larger percentage of these areas
4 involved.

5 Q. Okay. But you don't have any --
6 well, we will come back to that then.

7 Based on your experience, then, I take it
8 from that answer you would say that increased water
9 level is a problem not only with black spruce stands,
10 but could be a problem in black spruce stands -- sorry,
11 let me go back again.

12 Based on your experience, would increased
13 water level be a problem not only on black spruce
14 stands within your particular region, but also for
15 black spruce stands within the Clay Belt?

16 A. Yes. Yes, very much so.

17 Q. And you will see under the heading
18 Annual Area Not Regenerated, we have item (a), poor
19 stony sites, as well as item (c), residue prevents
20 treatment. And those two figures together, at least
21 for the northwestern region in 1970, add up to nine per
22 cent; correct?

23 A. Altogether nine per cent, that's
24 correct.

25 Q. Okay. And then we have the one per

1 cent for increased water level which brings it up to 10
2 per cent, and then item (d) is reserves, roads, et
3 cetera, and there is a figure again of one per cent?

4 A. Yes.

5 Q. Okay. Now, would you agree with me
6 that the reasons why this 10 per cent of the area which
7 is removed from timber production can be attributed --
8 the reason why this 10 per cent area is listed there is
9 that those factors would all be factors that could be
10 attributed to timber management activities?

11 I'm leaving aside the question of roads
12 and reserves for the moment.

13 A. Yeah, I think so. Yes.

14 Q. Okay. And would it be fair to say
15 that this 10 per cent annual area not regenerated would
16 be based on silvicultural activities and what has been
17 termed normal operating areas?

18 A. That is probably field or territory
19 where the "normal operation" contribute most of the
20 damage or most of the difficulties.

21 Q. Okay. Just so we are clear, because
22 I know in your evidence you had some concern about the
23 definition, when I use the term normal operating areas
24 I am referring to areas where there are no area of
25 concern values identified for the purposes of planning,

1 and so the main purpose of operating within an area is
2 to carry out timber management activities.

3 A. Madam Chairman, I'm puzzled about
4 term normal in the first place. I haven't got a
5 definition as yet for it, but I know that the normal
6 operation are widely used over most of the productive
7 forest lands, but I do not see an item here the
8 definition what normal means.

9 Q. Okay. What I am suggesting is when I
10 use the term normal operating areas, what I am
11 referring to are the areas across the province where
12 the purpose of carrying out activities in that area is
13 for timber production purposes as opposed to an area
14 that may be set aside for protection of another value.

15 A. Area of concern.

16 Q. Yes.

17 A. You may be right.

18 Q. Okay.

19 A. I haven't got the answer to it.

20 Q. So you don't have in your mind your
21 own definition of normal?

22 A. As yet, no.

23 Q. Okay. I think we will come back to
24 that then.

25 Now, based on your experience in the

1 field, do you suspect that a figure of 10 per cent of
2 area lost to timber production is an accurate figure,
3 is a high figure or a low figure?

4 A. Well, from my experience of many
5 years, especially last few years, I have seen increase
6 in this damage due to the new techniques, new
7 technologies and new equipment being used on the area
8 which do get damaged or are damaged by this equipment.

9 So there is an increase since the new
10 technology of full-tree harvesting and deliveriess of
11 wood to the main roads and the procedures on the
12 roadside. Yes, I see considerable increase, but this
13 is my guess and my observation, Madam.

14 Q. Now, there has also been evidence,
15 Mr. Marek, that areas lost to production as a
16 proportion of area cut could be as high as 22 per cent.
17 Are you aware of that evidence?

18 A. There has been many suggestions about
19 percentages which have been taken out of production
20 temporary or on the longer period.

21 And while I doubt that really serious
22 undertaking has been accomplished about the true
23 percentage, what the true percentage really is, I
24 cannot pass judgment. I think this is a field which
25 should be explored in the near future in order to grasp

1 this removal of these productive forests out of
2 production. I think most of them are guesses.

3 Q. In your view, Mr. Marek, what would
4 be the impact on wood supply if the loss was in fact 22
5 per cent?

6 A. If we are, Madam Chair, if we were
7 removing certain percentage out of production,
8 temporary on the long-term -- we must be very careful
9 when we're talking about temporary because immediately
10 I have to quantify for how long when this recovery
11 will -- or move it permanently.

12 Again, we are dealing with hypothetical
13 figures.

14 Q. Just so you are aware, Mr. Marek, the
15 proportion of the area cut that could be lost to
16 production at a rate of 22 per cent was a figure that
17 was used in the Dixon report?

18 A. That's correct. The answer to it is
19 if you remove something from the production, then of
20 course immediately you are demurring your sustainable
21 policy.

22 This is no secret that foresters were for
23 years and years grappling with the problem how much we
24 remove, and in this case if you remove even one per
25 cent, you are dealing with problem of sustained yield

1 policy.

2 Q. And so, Mr. Marek, would it be fair
3 to say that regardless of what the figure is then in
4 relation to area lost to timber production, the import
5 of your evidence is that silvicultural practices that
6 result in any percentage of area cut being lost to
7 production is unacceptable?

8 A. Just a second. Are we talking about
9 silvicultural practices or harvesting practices?

10 Q. I'm talking about silvicultural
11 practices.

12 A. Silvicultural practices.

13 Q. Which would encompass your harvesting
14 system.

15 A. I see. So you are talking
16 combination. Very much so, yes.

17 See, I don't want to create the feeling
18 here that it's harvesting which does the most damage or
19 silviculture which does the damage. So when you talk
20 about together in the end, yes.

21 Q. And I take it, Mr. Marek, that it
22 goes without saying that it is also the import of your
23 evidence that the intent of doing silviculture is to
24 maintain or enhance the productivity of the site?

25 A. Yes, maintain or enhance.

1 MR. MARTEL: Could I ask you a question
2 that deals with all of that. If the amount that we
3 were producing annually increases --

4 THE WITNESS: You mean the cutting?
5 Harvesting.

6 MR. MARTEL: Right. Is there somewhere,
7 and maybe you can clarify my thinking on this, a target
8 that we are aiming at that will, in fact, see us
9 attempt to produce the same amount of lumber or timber
10 annually so that we know what in fact we have to
11 regenerate or will that always be a floating figure
12 depending on markets and everything else?

13 In other words, what should we be
14 striving for, to try and get a target that meets a
15 certain need and then try to reach that target by
16 practising intensive silviculture in areas that you
17 would set aside?

18 THE WITNESS: Mr. Martel, as you probably
19 heard in the witness statement we are practising, we
20 have a targets, there are targets assigned to
21 districts, to regions, to the province. We know very
22 well what they are.

23 Now, beside that, I suppose, there is
24 always the fluctuation of these productions. I mean,
25 you said we are increasing, increasing the production

1 of lumber or timber.

2 It goes up and down one year than the
3 another, but in general terms, may I suggest to you
4 that sustained yield policy or sustained yield concept
5 is mostly economically viable concept. It's not
6 something which is -- could be practised easily in the
7 forest.

8 As a matter of fact, there are scientists
9 are who are telling us in the last few years that
10 indeed sustained yield management is a myth.

11 Now, if you take it as something which is
12 carved into stone and say we have to cut so much and we
13 have to regenerate so much, that's one concept. If you
14 are going to take strictly economic factors, then you
15 have a completely different concept and there are
16 several books written on it.

17 But to answer your question, how can we
18 get close to some kind of sustained yield management,
19 indeed we have to look how much we cut and how much is
20 there; in other words, we cut only certain portion
21 depending on the rotation age and so forth.

22 One of the problems I think Ontario has,
23 and it's not only Ontario, it is all across the North
24 American continent, especially in Canada, that we still
25 really don't know what we have. So how can we practice

1 sustained yield management if you don't know how much
2 you have under production, if you cannot project the
3 yields from year or the dynamics. How can you really
4 say we are practising sustained yield management.

5 So I think that --

6 MS. SWENARCHUK: Mr. Martel, I wonder if
7 I hear the echos of witness statement No. 7 in your
8 question.

9 MR. MARTEL: I am working on that
10 because, but the problem is as I go around and I read
11 these figures --

12 MS. SWENARCHUK: It is a subject matter
13 that's going to be addressed during that -- sorry, not
14 No. 7, No. 5. There are chapters on that in the
15 witness statement. Perhaps Mr. Benson can help you
16 with that.

17 MR. MARTEL: The thing I just looking for
18 was, what is the long term thing that we are referring
19 for?

20 As we try to make a decision, are we
21 reaching for a figure that we want to try and reach
22 annually and reproduce that amount so 80 years down the
23 road we are back to square one, or is there some moving
24 target out there that is illusive and we never really
25 know what it is that we are trying to sustain?

1 Having read Mr. Benson's statement...

2 THE WITNESS: He doesn't have an answer
3 to it either.

4 MR. MARTEL: That was my problem. I came
5 away once more and, quite frankly, I simply can't
6 figure out -- I know the targets and I know that way
7 back 20 years ago or whatever it was we set 9.1 million
8 cunits, but I don't know if it is more illusion or
9 what's the real ultimate aim?

10 What are we trying to achieve on a
11 sustainable basis so that we can somehow say: Yes, on
12 this management unit we have to grow so much there,
13 taking into consideration what Ms. Seaborn is talking
14 about if a certain amount isn't reproduced.

15 It's so fuzzy, at least to me.

16 MADAM CHAIR: I think Mr. Martel is
17 asking you if you have any views about sustained--

18 THE WITNESS: I have strong views.

19 MADAM CHAIR: --yield and the way we
20 follow it in Ontario, Mr. Marek.

21 THE WITNESS: Mr. Martel, if we are going
22 to talk about sustainable management and you know that
23 cliche of some years since we start that term sustained
24 management, sustained on this planet, sustained in this
25 forest and so on.

1 Mr. Martel, one of the aims is 'first to
2 know what we have and I don't know what we have. If I
3 knew what we have I would provide more realistic answer
4 to you, and I think that's the purpose of this hearing,
5 that that question ultimately will be asked: What do
6 we really have today, five years from now, 20 years
7 from now and so on.

8 I think until we answer that question
9 with -- more in precise terms as we are now, and I
10 caution you. All these figures since 1970, we were
11 talking one-third regeneration one thing, it's not
12 regenerated one-third, then one-third we have to
13 regenerate. You know that 1970's cliché which came up
14 in a conference in Thunder Bay, one-third, one-third
15 and one-third and we're okay.

16 Now, in the meantime, who looks a little
17 bit farther ahead and say: Now just a second, is that
18 third really one-third what we have to do or what we
19 have already done.

20 So unless we know for sure what we are
21 really have or as close as possible, then any
22 "sustainable management" is big question mark.

23 MADAM CHAIR: Thank you, Mr. Marek.

24 Ms. Seaborn?

25 MS. SEABORN: Thank you, Madam Chair.

1 Mr. Martel, I think this is a topic that
2 is going to be revisited--

3 MR. MARTEL: I hope so.

4 MS. SEABORN: --probably a number of
5 times before this hearing is complete.

6 Q. Mr. Marek, I want to deal now with
7 the issue of full-tree harvesting, and is it a fair
8 summary of your testimony that in your opinion
9 full-tree harvest on nutrient poor sites can lead to a
10 loss of site productivity?

11 A. That's correct.

12 Q. You also have a concern about large
13 clearcuts when the full-tree harvesting method is used
14 as the cut-overs generally require extensive or
15 artificial regeneration?

16 A. On certain sites, yes.

17 Q. Okay. And Mr. Marek, I want to have
18 a look for a moment at Exhibit 1421 and this is a paper
19 that was prepared by Drs. Methven and Carlisle.

20 A. 1421.

21 Q. Perhaps Ms. Swenarchuk will provide
22 you with a copy.

23 MS. SWENARCHUK: (handed)

24 THE WITNESS: Okay.

25 MS. SEABORN: Q. Have you ever read this

1 document?

2 A. No. Not this one, no.

3 Q. Okay. So you are not familiar with
4 it?

5 A. No. Not this one, no.

6 Q. Okay. Could you turn, Mr. Marek, to
7 the third from last page, and keeping in mind that you
8 haven't reviewed this document before, I do want to ask
9 you your opinion on a statement in the document.

10 A. In the discussion, Madam?

11 Q. Yes, in the discussion. On the
12 right-hand page -- right-hand side of that page there
13 is a paragraph that starts with: "Understanding the
14 effects..."

15 A. Yes, I have it.

16 Q. If you move down that paragraph you
17 will see the sentence that begins with: "Until..."

18 A. "Until we know more..."

19 Okay.

20 Q. Okay. And the document says that:

21 "Until we know more, we should rely on

22 the basic principle of good resource

23 management so often ignored. If more is

24 taken out of the system than is returned

25 this is bad stewardship. Any nutrient

1 deficit should be regarded as a
2 management failure quite regardless of
3 magnitude."

4 Now, would you in general support the
5 statement in this article?

6 A. I would.

7 Q. And, Mr. Marek, this report, unlike
8 the report that you prepared with Messrs. Timmer and
9 Savinski, does not contain any recommendation against
10 the use of full-tree harvesting?

11 A. Doesn't?

12 Q. Does not contain any recommendations?

13 A. How to avoid it or how to deal with
14 it?

15 Q. This paper does not contain
16 recommendations similar to the recommendation --

17 A. Yes, we have recommended certain
18 things in our report.

19 Q. That's right. This paper hasn't
20 recommended certain things?

21 A. No.

22 Q. However you would agree with the
23 general statement that I just read?

24 A. This is a very general statement I
25 agree with, yes.

1 Q. Okay. And would it be fair to say
2 that in your view, that your view of good resource
3 management in the context of full-tree harvest is that
4 on certain sites the forester shall prescribe
5 conventional harvesting operations and full-tree
6 harvesting ought not to be carried out?

7 A. I have a problem with that
8 conventional harvesting because conventional harvesting
9 means what? Harvesting which was done before full-tree
10 logging back to 1950 or '40.

11 There were some conventional harvesting
12 and I think one has to clarify exactly what we mean by
13 conventional harvesting, Madam.

14 Q. Okay. Well, let me put it this way.
15 Is it fair to say that it's your view that on full-tree
16 sites the harvest method -- I'm sorry, that on certain
17 sites the harvest method should not be full-tree
18 logging, it should be either shortwood logging or
19 tree-length logging?

20 A. It should be some logging or some
21 logging system, Madam, which will leave nutrients on
22 the site.

23 Q. Okay. And if under current practices
24 that logging system would be the tree-length or the
25 shortwood method, you would prefer that logging method

1 to full-tree harvesting on certain sites?

2 A. I have to qualify it by saying,
3 Madam, yes, with reasonable standard of utilization.

4 By that I mean that the past logging
5 method in many instances left too much debris and I am
6 talking not only the foliage; in other words, the
7 needles, the tops, the cones. I'm talking about wooden
8 material; in other words, logs or remnants of logs, and
9 I think that would be my criteria for sound forest
10 management. Leave enough so the nutrients are being
11 used by the site condition.

12 Q. Okay. Now, in your slide
13 presentation you explained that a number of the sites
14 and the boreal forest are fragile sites; is that
15 correct?

16 A. Fragile or unstable, yes.

17 Q. Now, do you have any opinion as to
18 the percentage of the boreal forest that's susceptible
19 to nutrient depletions?

20 A. From my observation and very kind of
21 green thumb research, I am convinced that we have a
22 more than is usually stated or admitted.

23 Now, again, what percentage may be in
24 certain areas or how it will be distributed in the
25 boreal forest, I have found these sites right across

1 this spectrum regardless, say, from Kenora right down
2 to Quebec border and they are seriously underestimated,
3 the size of the "unstable sites."

4 Q. Now, Mr. Marek, a report that you
5 prepared with Dr. Timmer and Savinsky has been referred
6 to a number of times to date in this hearing and I want
7 to ask you some questions, some particular questions in
8 relation to your report.

9 First of all, are you aware -- Madam
10 Chair, the Timmer and Savinski report is referred to in
11 the MNR's Panel 10 witness statement and it also
12 appears in the FFT source book. So whatever is most
13 convenient.

14 MS. SWENARCHUK: What page?

15 MS. SEABORN: It begins at page 451 in
16 the Panel 10 witness statement.

17 MS. SWENARCHUK: (handed)

18 THE WITNESS: Thank you, Madam.

19 MS. SEABORN: Q. Now, Mr. Marek, there
20 has been evidence presented to the Board that the
21 recommendations contained in your report have not been
22 adopted by MNR and there have been a variety of reasons
23 put forward for that position, and I want to obtain
24 your opinion as to the rationale that has been
25 explained for the rejection of your recommendations.

1 A. Correct.

2 Q. Now, the first general reason why
3 your recommendations were rejected by MNR was that the
4 Foster and Morrison report which was written in 1987
5 came to different conclusions than your report and, as
6 you discussed with Ms. Cronk, the Foster and Morrison
7 report found sufficient nutrient reserves and
8 replenishment to sustained productivity of the next
9 forest stands after full-tree harvest.

10 Now Foster and Morrison examined one
11 stand; correct? The Foster and Morrison report --

12 A. I witnessed examination of one or two
13 stands, but I cannot tell you beyond. Mr. Morrison
14 researched many stands in Ontario, jack pine stands,
15 and you are you probably are away of some of the
16 reports. I cannot speak for Mr. Morrison.

17 Q. I am speaking, Mr. Marek, in the
18 context of his 1987 report. He reported on one black
19 spruce stand?

20 A. Yes, that's right. Yes, I
21 understand.

22 Q. And in your report you studied four
23 stands; correct?

24 A. Yes, of different productivity.

25 Q. Yes. And I believe you concluded

1 that on three of the four sites examined there was some
2 cause for concern? There was cause for concern --

3 A. Would you repeat it again.

4 Q. I believe you concluded in your
5 witness statement that on three of the four sites you
6 looked at in your report there was some cause for
7 concern?

8 A. No, I don't think there was, really
9 concern in two sites. I know very well what the report
10 states, but in hindsight if it was developing now and
11 what I have tried to document in my observation --
12 observe since the report was written, it seems to me
13 that the concern appeared on two sites and that was
14 both black spruce sites.

15 The other one, which was the harwood and
16 the other one which was -- they are numbered here, 1,
17 2, 3, 4. The concern is in two black spruce sites and
18 no concern in the other which was the hardwoods and old
19 cut-over of jack pine, some white pine and partly mixed
20 wood stands. So it's two I am concern with,
21 whereabouts in the report I think the really concern is
22 based on one site.

23 Q. Okay. And in terms of you have now
24 qualified your statement in relation to which sites you
25 were concerned about, you were concerned, though, about

1 the black spruce sites?

2 A. Both black spruce sites.

3 Q. Okay. Now, Mr. Marek, would you
4 agree with me that -- let me go back. You have spoken
5 quite a bit in your testimony about the need to be site
6 specific?

7 A. Correct.

8 Q. And that it's difficult to make too
9 wide generalizations?

10 A. Yes.

11 Q. Okay. Now, would you agree with me
12 that if it was argued that it was inappropriate to
13 extrapolate the results from your study to conclude
14 that there is a problem with site productivity, that it
15 would also be inappropriate to extrapolate from the
16 results from the Foster and Morrison study to say there
17 isn't a problem with full-tree harvesting?

18 I mean, it cuts both ways?

19 A. Yes. Could I answer you this way,
20 Madam. Black spruce is a shallow rooted species, is a
21 species which is tolerant to extreme conditions, is
22 also very sensitive to conditions which we create.

23 If one would measure some of these
24 parameters used in all reports, as compared the
25 parameters -- and I'm talking about the input on this

1 data here. If one would measure it after cutting, you
2 may find very quickly that the parameters change to
3 such a degree that, as a matter of fact, you don't
4 recognize these parameters from one situation to the
5 other.

6 And here is the problem which I found in
7 black spruce, that black spruce because it is so
8 shallow rooted it requires certain biological activity
9 in the upper strata of these forest floors, is
10 extremely sensitive to it and, hence, I have noticed
11 that we have a problem with two black spruce sites
12 which were sampled.

13 Now, what Mr. Morrison said and we did is
14 obvious, we are not dealing with certain sites in situ.
15 And several other scientists like Gordon and so on or
16 Weetman, they all were very conscious, they say: Yes,
17 certain sites have a problem on short term, long-term,
18 perhaps some don't, and to generalize on this is
19 difficult.

20 Q. And I take it then you would agree
21 with me that it would be inappropriate for one to rely
22 then on the results of the Foster and Morrison study of
23 one black spruce stand to conclude that there is no
24 problem with full-tree harvesting?

25 A. I think so. I think we discussed

1 quite frequently, Madam, and it look like with more
2 understanding we should probably get proper answers.

3 Q. Now, another reason why your
4 recommendations, Mr. Marek, were rejected was that
5 there was a criticism that you had assumed that the
6 nutrient pools were in a steady state.

7 Are you aware of that testimony?

8 A. Yes, a steady state has been
9 discussed and I'm aware of that discussion throughout
10 the hearings, Madam, and I'm quite sure that this will
11 not be end of the discussion. Yes, I do.

12 Q. Would you agree with the evidence
13 that endeavouring to determine a flux or the rate at
14 which nutrients are coming out of the mineral soil from
15 the forest floor is very difficult and has not been
16 fully addressed by scientists?

17 A. The problem of fluxes, of ecosystem
18 fluxes, and there are so many you can encounter, but
19 they are independent on each other.

20 Do we know enough about the very
21 intricate and inter-related processes which are
22 biological, physical and chemical with the impact of
23 others which we cannot control.

24 - It's very critical for black spruce. The
25 reason I'm talking about black spruce most of the time

1 is because the fluxes which may or may not affect jack
2 pine, white pine or, for that matter, poplar do affect
3 black spruce, its characteristics, and I cannot accept
4 the generalization that the fluxes in general work one
5 way or the other. They do differently in one ecosystem
6 and they work differently in other ecosystem and to
7 pinpoint exactly because we are just at the beginning
8 of the research.

9 Q. What I want to clarify is, the
10 criticism that was made of your report was that the
11 nutrient pools were assumed to be in steady state.

12 Does that mean that you failed to assume
13 a weathering flux? Is that what that means?

14 A. Would you repeat it again, please?

15 Q. The criticism of your report in terms
16 of the conclusions you came to was that you had assumed
17 that these nutrient pools were in a steady state and
18 the criticism was that most scientists wouldn't build
19 that assumption in.

20 A. Most of the scientists are depending
21 on so-called steady state, Madam. Every research you
22 hear in ecosystem study, every one of them so far is
23 depending on "steady state."

24 Now, what is steady state? You can
25 discuss it for hours. But the fact is, Madam, that

1 when you talk about identical or fairly identical two
2 black spruce stand, fire originated, one on shallow
3 site, the other one deeper outwash - we did some study
4 on it recently, too - that the steady state is
5 interrupted, whatever steady state may mean for
6 individual scientists, is interrupted by harvesting, by
7 interference and there the condition after the
8 so-called steady state was that the measurements were
9 documented.

10 Perhaps to express it more closely. Why
11 do scientists deal with steady state? The reason being
12 is they can measure some of these parameters in the
13 state, the last state of the forest itself. When the
14 forest reaches maturity, we assume it is in steady
15 state. So the measurements are done under that
16 condition, steady state.

17 What we must not imply is that that
18 steady state have a certain -- how should I put it.
19 That steady state is, No. 1, severely interrupted by
20 removing the trees, by affecting the site and this is
21 where the problem starts. We can measure the output of
22 the steady state, but we cannot measure at all the
23 beginning of new ecosystem.

24 Now, I don't know if I'm expressing
25 myself clearly. You can measure the volumes in steady

1 state because there is so much nitrogen, and it's very
2 clearly identify in some of these research numbers.
3 You can measure that very clearly. There is so much
4 nitrogen coming in, we don't know where it's coming
5 from, but it's coming in.

6 You can measure also the output layer for
7 the nitrogen that goes with everything, but how we
8 interrupt these flows from steady state into the
9 disturbed state we cannot measure.

10 Q. Mr. Marek, just to try and put this
11 back into context. This Board has in earlier panels
12 heard some evidence on the issue of flux--

13 A. Yes.

14 Q. --and nutrient pools. In your view,
15 are the results in your study any less valid because
16 you assumed that the nutrient pools were in a steady
17 state? Does this make any difference to your
18 conclusions?

19 A. Well, it makes a difference if
20 somebody states that if you remove certain elements at
21 the steady state; in other words, when the stand is
22 mature, you cut it, you remove these nutrients away and
23 then you say: Okay, the same nutrient state in situ or
24 in the same condition on the cut-over, then we are
25 talking about two completely different conditions.

1 Some scientists say this will be -- these
2 whole fluxes will be in a state that they do not get
3 damaged, some feel that damage is done, indeed some of
4 the fluxes do not act or do not perform as in a steady
5 state for clearcutting and some sites can recover in
6 the normal -- through the normal chemical, biological
7 and physical very quickly, some don't.

8 Here the problem starts. Some people say
9 or some forester will say: What's about steady state.
10 The fluxes are there, the flux is going to continue the
11 same way through the process of recovery.

12 Q. So like a number of these subjects
13 then, Mr. Marek, is it fair to say there is a wide
14 opinion as to how to measure these things and how to
15 account for them in scientific reports?

16 A. Madam, the ecologists for years are
17 arguing this: Where is 60 per cent of nitrogen going
18 into the system, how much is going out of the system.

19 We can recover analytically what's going
20 out of the ecosystem through ecosystem study, the study
21 of function of nutrients going out of the system, but
22 we can not measure as yet 60 per cent of nitrogen which
23 is coming into the system.

24 So how can we in our small minds even
25 think about fluxes which occur quickly in the steady

1 state and the system recovery? We don't know even
2 where it comes from, at least part of the nitrogen
3 anyway.

4 Q. Now, Mr. Marek, another issue that
5 the Board has heard quite a bit about in the context of
6 the full-tree harvesting is that if a site is full-tree
7 logged in the winter more breakage occurs and,
8 therefore, twigs and branches are left on site.

9 You would generally agree with this
10 proposition?

11 A. That's correct. In other words, you
12 don't remove as much in winter as you remove during the
13 summer by shear volume removed from the site.

14 Q. There has also been evidence that in
15 the winter the use of a skidder or fellerbuncher will
16 result in 50 per cent breakage of jack pine branches
17 and 30 to 40 per cent of black spruce branches?

18 A. That depends on many factors, Madam.
19 That may happen sometimes under different conditions,
20 it may not happen.

21 Here, again, the study is very vague;
22 where, how, when and so on. We know what's there
23 because this ecosystem produced so much we can measure,
24 but when we start removing, then it is completely
25 different ballgame because you cannot quantify some of

1 these outputs with the inputs. We just say the
2 ecosystem recovery. Recovered in what scale, in what
3 measure, to what -- to these different fluxes? Is
4 phosphorus coming in or is nitrogen coming in and what
5 quantities? We don't know.

6 Q. Okay. I understand that, Mr. Marek,
7 and I want to deal with this more in the context of
8 breakage and equipment.

9 Now, we have also heard evidence that a
10 feller-forwarder -- when a feller-forwarder is used for
11 full-tree harvesting the trees are held completely in
12 the rack and you would not lose any branches on the
13 site; they would all go to the road side?

14 A. Mm-hmm.

15 Q. Yes?

16 A. Yes.

17 Q. And we have also heard evidence that
18 feller-forwarders are commonly used to carry out
19 full-tree harvest operations.

20 Would you agree with me that if an
21 operator only has available to him large mechanized
22 feller-forwarders, then there is no advantage to
23 restricting the full-tree harvest operation to the
24 - winter months because you have lost the advantage based
25 on your equipment selection?

1 Would you like me to put that again?

2 A. Please, would you.

3 Q. My point is that a feller-forwarder,
4 you have agreed with me, I take --

5 A. A forwarder is not -- okay,

6 Q. A feller-forwarder would take the
7 trees to the roadside and there wouldn't be the
8 breakage that one would get with a fellerbuncher;
9 correct. Are you familiar --

10 A. Feller-forwarder, yeah. I see what
11 you mean, now. Okay.

12 Q. So you would agree with that? If you
13 don't know enough about equipment then just tell me
14 that.

15 A. No, it's a problem to visualize,
16 Madam, a feller-forwarder and a fellerbuncher.

17 Fellerbuncher leaves the trees on the
18 site, feller-forwarder takes them down to the road.
19 Now, how much do I leave? It all depends on so many
20 conditions, Madam, and weather is very important
21 factor, time of the year is important factor.

22 In any case, may I suggest to you that in
23 the moment you start removing on certain sites the
24 foliage and small branches from the site to the roads,
25 you are taking away very important nutritional factor.

1 That factor may be minimal on good site where you have
2 a rebuild of up of nutrients immediately; in other
3 words, the capital there, on poor sites you are
4 removing something and that way they are affecting, of
5 course, the productivity. So that's what what I can
6 say.

7 Q. If you accept, though, in general
8 that in terms of full-tree harvesting a winter
9 operation on certain sites is more preferable than a
10 summer operation, then would you agree that if the only
11 equipment you are going to be using is a
12 feller-forwarder, then you have lost that advantage
13 because you don't get the breakage in any event no
14 matter what time of year it is?

15 A. Yes.

16 Q. Okay. Now, would a skid operation or
17 a fellerbuncher provide the kind of random distribution
18 that's desirable amongst a site?

19 A. No, it would not. Madam, here you
20 will not keep on a site nutrients we are talking about
21 in last ten minutes. We talked about these different
22 techniques. To my view we have to leave or have
23 instruments or have technology which is going to leave
24 large part of the foliage and the upper crown, plus the
25 cones on the site and that can be done only when you

1 cut the trees they are going to leave some part of the
2 trees behind and you are going to remove the bole or
3 woody branches. That's the only way I can see.

4 In other words, it got to be operation
5 where you will restrain or not forward the total trees
6 to the roadside.

7 MADAM CHAIR: So you are saying, Mr.
8 Marek, under no conditions would you approve the use of
9 a feller-forwarder, because they don't do that?

10 THE WITNESS: No. That might be the
11 cheapest way to get the tree from the site, but the
12 damage also will be there that we are removing the
13 biomass or the part of the biomass which is
14 nutritionally rich and should be left on the site
15 beside the cones which are other aspect.

16 MS. SEABORN: Q. Mr. Marek, returning
17 again to your study, if you look at page 454 of the
18 Panel 10 witness statement.

19 MADAM CHAIR: What page is that of the
20 published study?

21 MR. FREIDIN: 134.

22 MADAM CHAIR: Thank you.

23 MS. SEABORN: Thank you, Mr. Freidin.

24 MS. SEABORN: Q. Mr. Marek, the big
25 green book.

1 A. Oh, this one. 134?

2 Q. It's page 454.

3 A. Okay.

4 Q. Or page 134 of your study.

5 A. Yes.

6 Q. Now, Mr. Marek, you have on Table 1
7 the stand characteristics of the four study sites and
8 for black spruce deep these stand densities is listed
9 at 1,960 stems per acre and for the black spruce
10 shallow the stand density is listed at 2,140 stems per
11 acre?

12 A. Correct. Very identical stems.

13 Q. Now, there was testimony presented to
14 the Board that these were exceptionally high numbers
15 for natural black spruce stands.

16 A. Not in the Nipigon region and not in
17 the area that report deal with. I have measured some
18 many of them and they are fairly identical. They
19 always get the values we have measured here.

20 Q. Now, Mr. Marek, based on the
21 information in the chart with the age of the two black
22 spruce stands that are both 126 years and based on the
23 height, I did a calculation to see what site class
24 based on Plonski that would bring those two --

25 A. That would be fairly high class,

1 Madam.

2 Q. Would you agree with me that both
3 these sites would be in the range of site class 2?

4 A. Probably site class 2, but it's going
5 to definitely be site class 3 or site class 2.

6 Q. Okay. Could you turn for a moment to
7 the silvicultural guide for the spruce working group in
8 Ontario. That's Exhibit 382.

9 A. Yes.

10 Q. And page 23.

11 A. Page 23?

12 A. Correct.

13 Q. Now, Table 2 is entitled Typical
14 Growth and Yield Data--

15 A. That's correct.

16 Q. --at Maximum Mean Annual Increments
17 for Natural Black Spruce Stands in Ontario.

18 A. Yes.

19 Q. Now, if we look under stand site class
20 2, we have an age for black spruce of 125 years?

21 A. That's correct.

22 Q. And based on this chart, the density
23 or the stems per hectare for a natural black spruce is
24 listed as being 2,367; correct?

25 A. That's right.

1 Q. Okay. Now, it appears then to me
2 that the stems per hectare used in your report for both
3 stands were actually left less than the density that
4 appears in the spruce guide?

5 A. Yes, I notices that, but again when
6 these stands, these even-aged black spruce stands, fire
7 originated stands at age 125 -- you know, when you talk
8 about 100 to 150 trees per hectare it doesn't mean very
9 much; does it. It's fairly synonymous, it is fairly
10 even.

11 Q. In any event, though, I take it you
12 would agree with me that the number you used are not
13 exceptionally high for black spruce?

14 A. No, this was my objection when I
15 heard these during the testimony that apparently these
16 stands were classified as something, I don't know, so
17 diverse, and so I was wondering if the people who did
18 it really are aware of the fire originated stands.
19 There are densities according to the age class 125. I
20 have cruised many of them.

21 Q. The Foster and Morrison study, 1987,
22 looked at 110 year old black spruce stand and that
23 would --

24 A. Much higher density.

25 Q. Yes.

1 A. I know that stand.

2 Q. Now, that stand -- I am going to go
3 in a moment to the density, but that stand, Mr. Marek,
4 was site class --

5 A. Was it not three. I thought it was
6 site class three.

7 Q. Well, I have done a calculation based
8 on the age over height relationship and it is my
9 information that that particular stand would fall
10 somewhere closer to site class 2.

11 A. Oh, yes, could be.

12 Q. Okay. And according to the report
13 itself, which is Exhibit 1552, that's found at Tab 21
14 of Ms. Cronk's material, I don't think it's necessary
15 for you to go there, but the stems per hectare for that
16 particular stand were listed at 1,200?

17 A. 1,200. That was fairly open stand.
18 Per hectare 1,200?

19 Q. Yes.

20 A. Oh, I see.

21 Q. If you would just turn, Mr. Marek, to
22 that report just because you seem uncertain about that.
23 If you look at Tab 21.

24 A. Okay, black book. I see, yes.

25 Q. Okay. And if you turn, Mr. Marek to

1 page 452, if you would.

2 A. Yes.

3 Q. The second page.

4 A. Yes.

5 Q. You will see right above the heading
6 Methods.

7 A. Method, yes.

8 Q. About the fourth last line it says
9 there were 1,200 stems per hectare.

10 A. Yes.

11 Q. Okay. Now, based on the same
12 criteria we just looked at in relation to the stands
13 you examined in your report, in your view is this site
14 understocked for natural black spruce stands?

15 A. Are you talking about 110? Here we
16 are talking about 120; right?

17 Q. Right.

18 A. The age. No, if I remember right,
19 Morrison examined -- I'm surprised he's talking
20 about -- he examined several stands and there is a
21 possibility that one of these stands could have been
22 damaged by winds; in other words, there was mortality.
23 I just cannot remember exactly.

24 Q. That's fine. I don't want you to
25 guess, Mr. Marek.

1 A. Pardon?

2 Q. I don't want you to guess, Mr. Marek.
3 If you don't know and you can't help the Board, that's
4 fine.

5 A. But it was definitely open stands
6 which was probably, what, 07 stocking or something like
7 that or even less.

8 Q. Now, if we just flip over the page,
9 Mr. Marek, to page 465 in the big book, big green book
10 that has your report in it.

11 A. Yes.

12 Q. This is at the conclusion page of
13 your study.

14 A. Yes. 450, 460?

15 Q. 465, please.

16 MR. FREIDIN: Or 145.

17 MS. SEABORN: Or page 145 of the text.

18 Thank you, Mr. Freidin.

19 THE WITNESS: Yes.

20 MS. SEABORN: Q. Now, Mr. Marek, the
21 second paragraph on that page says:

22 "This study was conducted on only four
23 stands in the Nipigon area. Each stand
24 was representative of a major forest type
25 and forest type in the district.

1 However, because of financial and time
2 constraints, replication of each forest
3 type was not possible. Hence, the
4 recommendation that can be drawn from
5 this impact assessment are generalized
6 and... to the site and forest condition
7 of this region."

8 Then you list a number of guidelines.
9 That, in your view --- I'm sorry. Then it goes on to
10 say:"

11 "The following guidelines for minimizing
12 potential nutrient loss by forest
13 harvesting appear warranted."

14 Then there is a number of
15 recommendations.

16 A. Right.

17 Q. Now, Mr. Marek, in your view do the
18 conclusions reached by Foster and Morrison in 1987
19 diminish, if your opinion, the validity of the
20 recommendations contained in your report?

21 A. The judgment is here. The judgment
22 has two different -- not approaches, but two different
23 stands, two different stands and its all dynamics.

24 What bothers me here, Madam, is when we
25 classify stands in shallow sites. Shallow sites which

1 typifies, what, 12 centimetres of mineral soil over
2 bedrock. And I think that we are failing to recognize
3 that even there there may be tremendous difficulties to
4 really pinpoint down the sites as they really are.

5 When Morrison was studying and when we
6 have done it, the conclusion obviously was that the
7 parameters and the nutrients which were in or being
8 removed will not be balanced in the recovery stage.
9 Morrison didn't find it in this specific study. He
10 feels that it's not as urgent.

11 I think we are arguing here about things
12 which shows again, No. 1, the shortness of these
13 reports; in other words, this was a two-year master
14 thesis by Dr. Timmer's student I have initiated. Here
15 is something which I didn't initiate it, but it was
16 done by CFS and it seems here that one recommended this
17 and the other one recommended that.

18 Q. That's right.

19 A. What bothers me, Madam Chair, is this
20 and I have to repeat it again, these studies were not
21 continued, these studies were interrupted after the
22 goal was achieved, after we made analysis and analyse
23 these elements, drying out and so on and so on and that
24 was it; here are the results, you take it or leave it.

25 I was very unhappy. Madam Chair, when

1 this thing was finished, the Timmer, Savinsky, Marek
2 study, I was begging for continuation of this study,
3 begging because I knew there will be some other
4 scientist who will come and say, blah, blah, blah. And
5 I was very unhappy with it.

6 It shows me again, Madam, that if we are
7 going to start researching very temporary condition,
8 condition which may change in the next two, three years
9 by disrupting it, it is going to be always the problem
10 one scientist arguing against each other and we will
11 not find the ultimate or relative truth.

12 MR. MARTEL: What do you do, flip a coin?

13 THE WITNESS: I beg your pardon?

14 MR. MARTEL: What do you do, flip a coin
15 and decide who's right?

16 THE WITNESS: Well, this is the tragedy.
17 Who is right?

18 MADAM CHAIR: In the case, Mr. Marek, we
19 have heard evidence from a Dr. MacCormack, and you are
20 familiar with him from the United States.

21 THE WITNESS: Yes.

22 MADAM CHAIR: He has done lots of studies
23 on area called Hubbard Brook.

24 THE WITNESS: No, no, Mr. Borman.

25 MADAM CHAIR: Yes. But there are areas

1 that we have heard about that are set up as research
2 areas where you continue for a number of years to look
3 at something in an area. You don't hop around doing
4 research here and there you, concentrate it and follow
5 trends over time, and is there anywhere in Ontario
6 where we have forests that we do that kind of research
7 on with respect to this issue?

8 THE WITNESS: No, no. As you know, the
9 black spruce group was supposed to keep this study
10 going, but it was terminated to my disbelief and not
11 continued and, as I mentioned before, we now have two
12 reports seemingly contradicting each other.

13 Are we robbing sites of nutrients? Can
14 these nutrients be put back to cycling by just normal
15 processes for environmental richness which comes from
16 rain, as you know, and snow? Can this site build up by
17 its own nutritional capital in its own site. Some do
18 some don't.

19 The warning is there, but to be a hundred
20 per cent sure, Madam, we don't got a study which deals
21 with this issue and it's too bad.

22 MS. SEABORN: Q. So, Mr. Marek, I assume
23 that what you have just told the Board then that the
24 conclusions reached by forester and Morrison in 1987 do
25 not diminish in your mind the validity of your

1 recommendations?

2 A. Of course not.

3 Q. Okay.

4 A. May I add. You mentioned Dr. Borman
5 from Yale. I took Dr. Borman to these sites and we
6 took spent two days discussing the problem, the result
7 of this study, and Dr. Borman said to me on several
8 occasions: You know, George, when you deal with short
9 studies you are going to have quite a surprise in it,
10 there is going to be lots of disagreement on these
11 things and this is true.

12 When you have one, two, three study on
13 ecosystems on inputs/outputs of nutrient fluxes - and
14 it came up for discussion here - Madam, you cannot ask
15 miracles. We don't even understand some of these basic
16 fluxes. How can we get involved in recommendations
17 saying: Yes, this is true here. That's unfortunate.

18 Dr. Borman's study, he's been assisting
19 Hubbard Brooks since 50's. Now, he is dealing now --
20 just a few weeks ago I talked to him and he is dealing
21 with phenomenon of aerosols input into the ecosystem by
22 aerosols, particles which no one can see, no one one
23 can take which are effecting some of these fluxes which
24 apparently go right to the mineral soil deep, deep down
25 and changes all these...

1 MADAM CHAIR: Thank you, Mr. Marek.

2 MS. SEABORN, do you want to have the
3 afternoon break now?

4 MS. SEABORN: Yes, thank you, Madam
5 Chair.

6 ---Recess taken at 2:55 p.m.

7 ---On resuming at 3:20 p.m.

8 MADAM CHAIR: Please be seated.

9 MS. SEABORN: Thank you, Madam Chair.

10 Q. Mr. Marek I just have a few more
11 questions on the topic of full-tree harvest before we
12 move into a new subject area.

13 The Foster and Morrison conclusion in
14 1987 is based on the assumption that soil nutrient
15 reserves will be protected from leaching and erosion by
16 rapid revegetation.

17 Mr. Marek, in your opinion, if rapid
18 revegetation does not take place, would their results
19 be less promising for that particular site?

20 A. That's correct.

21 Q. Thank you.

22 A. As a matter of fact, Madam Chair,
23 revegetation is the most important part of this
24 rejuvenation of this ecosystem and if by further
25 activities the processes will not be able to take

1 place, farther disturbance, for instance, like we see
2 in logging and so on, then of course the ecosystem
3 cannot build it up and cannot get in the aggregation
4 period, "aggregation period", of course, the black
5 spruce is in the process -- a problem.

6 Q. I'm sorry, Mr. Marek. In your
7 opinion rapid revegetation after logging is a problem
8 with black spruce?

9 A. On many black spruce sites, yes.

10 Q. Thank you.

11 A. On rich sites where you have rich
12 nutrient capital which can allow these recirculation of
13 the nutritional capital plus, of course, the input from
14 the atmospheric -- like snow, which contains nutrients
15 and rain and so on, you can build it up very quickly.
16 That's why we call these sites unstable because they
17 cannot cope with this drastic change.

18 Q. Now, Mr. Marek, there are a number of
19 other papers that have been entered into evidence in
20 relation to full-tree harvest.

21 We have been through a number of them
22 with earlier witnesses and, Madam Chair, I don't
23 propose going through these articles in any detail with
24 Mr. Marek. There are a couple of conclusions that I
25 would like to ask Mr. Marek about and see if he agrees

1 or disagrees with the conclusions.

2 Q. Mr. Marek, if you could turn to page
3 349 of the Panel 10 witness statement. That's the big
4 green book in front of you.

5 A. Yes.

6 MS. SEABORN: That, Madam Chair, is the
7 Weetman article.

8 THE WITNESS: Right.

9 MS. SEABORN: Q. Page 349.

10 A. Yes, I have 349, Madam.

11 Q. Thank you. If you look on the
12 left-hand column under the heading Harvesting on Site
13 Fertility--

14 A. Yes.

15 Q. --the second last paragraph says:
16 "Site depletion by nutrient exports in
17 harvesting trees does not now seem to be
18 a major concern provided full-tree
19 harvesting is restricted to good sites."

20 Would you agree with me, Mr. Marek, that
21 that conclusion sounds very similar to some of the
22 recommendations that you put forward in your report?

23 A. That is correct, Madam.

24 Q. And in particular I am thinking of
25 the recommendation that says that:

1 "Conventional logging methods should be
2 restricted exclusively for fragile
3 shallow till sites. Full-tree harvest
4 and chipping operations should be
5 restricted to stands supported by
6 relatively deep mineral soils."

7 A. I'm fully aware of the recommendation
8 we made and it has been scrutinized since on many
9 occasions because I had a chance to see results and
10 monitors result of these four experimental areas, and
11 it seems to me that now after quite a few years of
12 observing I would conclude also many more sites which I
13 thought perhaps didn't qualify for these, but there are
14 many sites which can be deep, deep mineral soil sites.

15 Some of the sites I have examined, for
16 instance, the fluvial deposits where the fluvial
17 activity -- the nutrients were washed out of the system
18 or out of the sites and we have a problem.

19 So I think that besides the one
20 recommendation which states the only shallow till
21 sites, I would include in black spruce many more sites.

22 Q. So Mr. Weetman's statement in his
23 article is not inconsistent with your recommendations;
24 is it?

25 A. No, not at all.

1 Q. Okay. There was another Morrison

2 report that was referred to in the evidence and that is

3 the Nicholson, Foster and Morrison report, 1982?

4 A. Right.

5 MS. SEABORN: That, Madam Chair, appears

6 in the Panel 9 witness statement. I don't think it's

7 necessary for you to go to it.

8 Q. Are you familiar with that report?

9 A. That's correct. That report was done
10 under the black spruce working group and it was done in
11 area of these three areas which were described and
12 examined.

13 Q. Right. One of the conclusions that
14 these authors reached, Mr. Marek, was that man's
15 disturbance through forest harvesting can disrupt
16 nutrient and hydrologic cycles within boreal
17 ecosystems.

18 Now, that is a conclusion that is
19 consistent--

20 A. Throughout the whole...

21 Q. --consistent with your paper; is it
22 not?

23 A. That's correct, yeah.

24 Q. I would also, Mr. Marek, like to have
25 a look at MNR's evidence on this point in the witness

1 statement and, again, if you could turn to the big
2 green book, page 226.

3 A. Correct, I've got it.

4 Q. Now, the bottom of the page starts
5 with the sentence: "When considering..."

6 Do you see that, the last line on page
7 226?

8 A. Last line. "When considering
9 full-tree harvest..."

10 Q. Yes. It says:

11 "When considering full-tree harvest
12 conclusions are more tentative, but there
13 is general agreement that given rational
14 management for the site (e.g. appropriate
15 choice of rotation, subsequent
16 regeneration) inputs of nutrients will
17 balance increased exports in foliage
18 and branches."

19 And then it goes on to say:

20 "An exception could be sensitive sites or
21 those of marginal fertility. Gordon,
22 Timmer et al and Weetman and Webber
23 present concerns that some infertile or
24 shallow soils may be insufficient and
25 phosphorus, potassium or calcium to

1 sustain similar productivity in the
2 rotation after full-tree logging."

3 A. That's right.

4 Q. The paper goes on to qualify those
5 comments in the context of the Foster and Morrison
6 conclusions which we have already addressed.

7 Now, would you agree with me that the
8 exception that is referred to in the MNR witness
9 statement, the top of 13, "an exception could be
10 sensitive sites or those of marginal fertility", that's
11 a conclusion that's consistent with your
12 recommendation; is it not?

13 A. That is correct.

14 Madam Chair, I again like to draw your
15 attention to the terminology we are using, sensitive,
16 fragile, unstable and so on and so on. That's one of
17 the problems, that I think that if site has not the
18 nutritional capital which can build up the new status
19 for the ecosystem, they should be called, I don't know,
20 sensitive, fragile, but we should agree on some term
21 which will be used in this sense because it just leads
22 to confusion, and has been shown through the --
23 actually through the hearing where people are using all
24 kind of objective to this "unstability" which is a
25 proper term in ecological terms, unstable. Unstable

1 site is a site which, and so is goes.

2 So I think we should be using that term.

3 Maybe fragile under certain conditions, maybe not

4 fragile under other conditions which may lead to this

5 problem here, and I am very unhappy about the

6 terminology we are using, perfectly well knowing that

7 this objective may apply for certain conditions and may

8 not apply for others.

9 One of the great confusion, may I point

10 to, is the shallow tills over bedrock. Shallow sites

11 over bedrock can be very productive sites, very

12 productive sites, but when we are talking about shallow

13 sites immediately everyone: What does it mean.

14 Deep sites can be extremely unstable

15 sites depending on the treatment they receive after

16 cutting and disturbance. When you put on top of other

17 disturbance, it becomes really problem.

18 I'm sorry, but this is a very important

19 aspect of site productivity and the whole sustainable

20 development we talk about in broad terms.

21 MADAM CHAIR: We understand that, Mr.

22 Marek. Since the first day of the hearing we have had

23 confusions what people mean by various definitions.

24 THE WITNESS: It's funny that it cannot

25 be resolved.

1 MS. SEABORN: Q. Mr. Marek, I believe
2 you said that you would support more research in this
3 area and this is something that the Ministry of the
4 Environment and MNR have both recommended in their
5 terms and conditions should occur in the future and it
6 is something that Industry witnesses have said they
7 would be pleased to participate in.

8 Now, you are aware, Mr. Marek, that the
9 use of the full-tree method has increased from 20 per
10 cent of the harvest -- from 20 per cent in 1985 and in
11 1988 it was estimated that 65 per cent of the harvest
12 was accomplished using the full-tree method?

13 A. I think it is more than that, Madam,
14 now.

15 Q. So in your opinion it's increased
16 since 1988?

17 A. That's right.

18 Q. Thank you. Now, in light, Mr. Marek,
19 of the increase, at least since 1985 to 1988, and given
20 that there have been recommendations put forward that
21 more research should be done, would it be fair to say
22 that in addition to more research in order to ensure
23 that we do maintain this site productivity and maintain
24 nutrient reserves across the boreal that we need to be
25 cautious in implementing full-tree harvesting?

1 A. That's correct.

2 Q... And would you agree that we need to
3 be cautious while this research is being undertaken?

4 A. Yes.

5 Q... And would you agree with me that one
6 approach to ensuring that foresters are cautious in
7 planning their prescriptions would be to ensure that
8 recommendations were put into place across the boreal
9 forest that protected site productivity?

10 A. By virtue of better harvesting
11 practices.

12 Q. So in your view then it's better
13 harvesting practices that there needs to be a
14 concentration on?

15 A. That's just one of the aspects.
16 Prescription in harvesting practices and the subsequent
17 treatment we are affecting the site.

18 Q. And, Mr. Marek, just so you are clear
19 on my question, when I speak of prescriptions I am
20 including harvest and then the regeneration treatment
21 followed by tending if required.

22 A. Yes, yes.

23 Q. Now, Mr. Marek, in the opening day of
24 your testimony, which I can appreciate was some time
25 ago now, you made some opening remarks and said that in

1 your view there are two roles for a forester; the first
2 is the productive role where we harvest the forest for
3 the benefit of society and the other role is the
4 protective role?

5 A. Correct.

6 Q. And you stated that what has bothered
7 you is that Ontario foresters in general do not
8 understand and are guided by the protective role of
9 foresters?

10 A. Correct.

11 Q. Now, you showed the Board a number of
12 slides which, in your opinion, showed negative
13 environmental effects in what I would term normal
14 operating areas?

15 A. Yes.

16 Q. And while your slide presentation
17 focused primarily on black spruce, is it fair to say
18 that the slides were taken from across the boreal
19 forest, not just in your unit?

20 A. Yes. Well...

21 Q. Yes?

22 A. As a matter of fact, I have a map
23 which shows my tours and if you like to have it on the
24 board perhaps it shows the spectrum of these sites.

25 Q. Now, Mr. Marek, there was also

1 evidence presented to the Board and you agreed that
2 your knowledge of the Clay Belt is sporadic. Do you
3 recall that testimony?

4 A. Yes, I do.

5 Q. And the Board has heard evidence that
6 the Clay Belt is a somewhat self-contained geographic
7 region.

8 Would you agree with me, Mr. Marek,
9 though, that sites which are characteristic of the Clay
10 Belt can in fact be found outside of Clay Belt?

11 A. Because it's different geographic
12 regions, that does not mean that similar problems of
13 "water table" does not occur in other areas; in other
14 words, there is a connection just like there is a
15 connection through the whole global system.

16 So, in other words, ecosystems are
17 connected and there are certain things which are
18 identical, there are many which are not identical. To
19 understand them you must realize that all -- the whole
20 world is interconnected and so is the boreal forest and
21 so is, of course, the Clay Belt with adjacent regions,
22 yes.

23 Q. There are clearly differences between
24 the regions, but there are also similarities as well?

25 A. Black spruce is growing in both

1 areas, so I suppose that was one the identification.

2 Q. I want to ask you some questions, Mr.
3 Marek, about the Spruce Silvicultural Guide which is
4 Exhibit 382.

5 A. Right.

6 Q. Do you have that in front of you?

7 A. Yes, I have.

8 Q. Did you review this guide, Mr. Marek?

9 A. I read it.

10 Q. Okay. Mr. Marek, did you review this
11 guide for the Ministry before it was published?

12 A. No, I didn't have a part. As you
13 see, the writers are Arnup, Campbell, Raper, Squires --

14 THE REPORTER: Excuse me, Mr. Marek,
15 could you repeat that, please.

16 THE WITNESS: I will give to you.

17 No, I didn't review it.

18 MR. FREININ: The names for the record
19 were Arnup, Campbell, Raper, Squires, Virgo, Wearn and
20 White. That's what he said.

21 MS. SEABORN: Those names appear in the
22 acknowledgment section, page (viii) of the spruce
23 guide.

24 Q. Were you aware, Mr. Marek, that the
25 report you prepared with Messrs. Timmer, Savinsky is

1 referenced in the spruce guides in the bibliography?

2 A. Perhaps.

3 Q. You are not aware?

4 A. No, I'm not aware.

5 Q. Now, I want to obtain your opinion on
6 a number of items raised in the spruce guide and could
7 we begin by look at page 40, please, Environmental
8 Considerations.

9 A. Yes.

10 MS. SEABORN: Excuse me for one moment,
11 Mr. Marek.

12 Q. Now, page 40 under the heading
13 Environmental Considerations lists what I would call a
14 number of potential negative impacts?

15 A. Yes.

16 Q. I want to go through a number of
17 these impacts with you and find out whether you would
18 agree or disagree with the statements in the spruce
19 guides.

20 Now, first, on page 41 under Timber
21 Harvest--

22 A. Correct.

23 Q. --it says:

24 "On organic and poorly drained soils,
25 rutting and compaction interrupt the

1 micro-hydrogeology of the site which can
2 cause pooling of water. "

3 Would you agree that that is a
4 potentially negative impact?

5 A. Yes, it is. Also, it's not the major
6 one.

7 Q. It's not mayor, but it is a potential
8 impact?

9 A. Potential, yes.

10 Q. Thank you. Now, if you go over to
11 page 42--

12 A. Yes.

13 Q. --it says in the second paragraph:

14 "There are some evidence that
15 clearcutting results increased total
16 water yield and in certain instances
17 increased surface run-off because of the
18 loss of interception and
19 evapotranspiration by the forest. "

20 A. Yes.

21 Q. Would you agree that that's a
22 potential negative impact?

23 A. Very much so, yes.

24 Q. There is also a reference in the next
25 paragraph down that:

1 "The seasonal distribution of stream
2 flows may also be affected."

3 Would you agree with that?

4 A. Correct.

5 Q. And skipping down two paragraphs to
6 the one that starts with the word "conventional"?

7 A. Yes.

8 Q. The second sentence says --

9 A. "Full-tree harvesting removes more
10 biomass from..."

11 Q. "Full-tree harvesting removes more
12 biomass from a site than tree-length
13 harvesting that has been shown to have
14 minimal effects on soil nutrient status
15 on black spruce deep mineral soil sites,
16 even those of low fertility."

17 Then Weetman and Webber and your report
18 are referenced beside that statement.

19 A. Yes.

20 Q. Now, would you agree -- I take it you
21 would agree that that's also a potentially negative
22 environmental impact?

23 A. That's correct.

24 Q. And if we look on page 43 under
25 Renewal, there are a number of references that speak of

1 ...minimizing soil erosion and you would agree that soil
2 erosion generally can be a difficulty?

3 A. Yes.

4 Q. Now, Mr. Marek, turning back to page
5 40 of the spruce guide under Environmental
6 Considerations.

7 A. Page 40?

8 Q. Yes.

9 A. Yes.

10 Q. The first line under Environmental
11 Considerations refers to the class EA for timber
12 management and quotes from the class EA and says that:

13 "Timber management operations can cause a
14 variety of environmental effects. These
15 effects can be positive or negative,
16 short term or long term, direct or
17 indirect, temporary or permanent,
18 reversible or irreversible or
19 cumulative."

20 A. Yes, I read it.

21 Q. And then it goes down to the last
22 sentence in that paragraph and says:

23 "Most negative environmental effects can
24 be prevented or minimized through proper
25 planning and implementation of timber

1 management operations or mitigated
2 through application of effective remedial
3 measures."

4 Now, just stopping there. Would you
5 agree with me in general that most negative
6 environmental effects could be prevented through proper
7 planning of activities and implementation of
8 activities?

9 A. Yes.

10 Q. That should be the goal?

11 A. Yes, yes.

12 Q. Okay. And would you agree with me
13 that if there is a problem and remedial measures are
14 required to mitigate an effect, then these remedial
15 measures should be reported in a timber management
16 plan?

17 A. Yes.

18 Q. Now, at page 51 of the guide, just
19 skipping forward--

20 A. Yes.

21 Q. --the middle paragraph starts with
22 "Conventional full-tree harvesting..."

23 A. Yes.

24 MR. FREIDIN: What page was that?

25 MS. SEABORN: 51.

1 MS. SEABORN: Q. Now, it says:

2 "Conventional full-tree harvesting can be
3 employed on any site except for very
4 shallow soils."

5 And then there is another reference to
6 full-tree harvesting in the next paragraph down where
7 it starts with "Mechanized..."

8 A. That's right.

9 Q. And then it says:

10 "Mechanized full-tree harvesting can be
11 used on any site except where terrain and
12 stand conditions limit the use of
13 mechanical equipment."

14 Now, Mr. Marek, would you agree that
15 these are two fairly straightforward directions for a
16 forester to consider when preparing groundrules?

17 A. They may be straightforward, all
18 right.

19 Q. And would you agree with me that
20 these are directions that are based on physical
21 limitations?

22 A. Well, a statement like this is great
23 oversimplification of the actually happenings, Madam,
24 and actually possibility of damage. This is very
25 dangerous oversimplification.

1 Q. Would you say that generally
2 full-tree harvesting activities have been limited, in
3 your experience, based on these sorts of directions?

4 A. Yes.

5 Q. Okay. And would you agree that your
6 report is not quoted in the spruce guides for the
7 proposition in relation to restricting full-tree
8 harvest on certain sites?

9 A. Yeah. Maybe I express this way,
10 Madam. The conventional full-tree harvesting can be
11 employed on any sites except for very shallow soil.

12 Now, here is a statement which I cannot
13 recognize as expression of concern because, as I stated
14 before, this is not only applicable for very shallow
15 soils, but also for soils which are unstable. Say the
16 sites or systems are unstable.

17 So here is a quantification very shallow
18 soils, but I do feel that should be expanded on many
19 other conditions for many other soils.

20 Q. Okay. And, Mr. Marek, just going
21 back to the paragraph I drew your attention to earlier,
22 your report is quoted in the spruce guides to support
23 the proposition that full-tree harvesting can --
24 --removes biomass from a site, more site than tree-length
25 harvesting and it is also quoted to support the

1 proposition that there isn't a problem with soil
2 nutrient status on black spruce deep sites but--

3 A. -- Correct.

4 Q. --when we look at page 51 there is no
5 reference to your report in relation to shallow soils;
6 correct?

7 A. No, none whatsoever. It seems
8 like -- that's why I say it's oversimplification. It
9 should have been -- further qualification should be put
10 in that paragraph or prescription or whatever.

11 You see, this is a problem with normal
12 operation, Madam. When you say conventional full-tree
13 can be employed on sight except for any shallow soil,
14 again is that a normal operation?

15 So I think that the concern should be
16 expressed.

17 Q. And, Mr. Marek, is it your experience
18 that operations are limited on certain sites based on
19 nutrient limitation as opposed to stand and terrain?

20 A. Very much so. This is exactly what I
21 am aiming for.

22 Q. No, I understand that's what you are
23 aiming for. What I am asking you, though, is, is it
24 your experience that to date operations have been
25 limited on sites based on nutrient concerns as opposed

1 to operational concerns?

2 A. Yes, the operation is a priority, I
3 suppose. Is that what you mean?

4 Q. What I am suggesting is that when
5 there is a decision made not to carry out a harvesting
6 operation or in the context of harvesting
7 considerations, the main consideration is going to be
8 physical limitations to carrying out an operation
9 rather than nutrient limitations of a site?

10 A. Well, it's a biological concept
11 versus economic concept. Is that what you mean?

12 Are asking me, because the way you
13 express it I don't understand, but I think that the
14 concerns are one to preserve the economies of the site,
15 the other one is the economics.

16 Q. I understand that, but what I am
17 asking, Mr. Marek, and I will try to turn it around and
18 make it a little easier.

19 In the context of foresters planning
20 their operations, is it fair to say that operational
21 restrictions are based on physical limitations of the
22 site rather than an analysis of whether or not the site
23 could support a second generation? That's not normally
24 a harvesting consideration?

25 A. I am just trying to visualize what

1 you are saying there.

2 Q. Okay. Mr. Marek, let me try -- I
3 will come back to it later and try and make it more
4 clear for you because I am obviously having a
5 difficulty in explaining myself to you on that point.

6 Now, there has been evidence, Mr. Marek,
7 that the use of this guide, similar to other
8 silvicultural guides, is mandatory for unit forester
9 when he is developing his silvicultural groundrules?

10 A. It's a guide book, that's correct.

11 Q. All right. We have also heard
12 evidence that environmental protection is inherent in
13 the groundrules? It is the groundrules that will
14 ensure that there is going environmental protection in
15 these normal operating areas?

16 A. So it says.

17 Q. Okay. And we have heard evidence as
18 well that implementation of any of the practices
19 described in the silvicultural groundrules is expected
20 to result in minimal and acceptable environmental
21 effects?

22 A. Yes, it was states on several
23 occasions. Correct.

24 Q. Okay. Now, based on your experience
25 and the slides you have shown, is it fair to that in

1 your view the planning and implementation of practices
2 as currently prescribed by the groundrules has not in
3 all instances resulted in minimal or acceptable
4 environmental effects?

5 A. That is correct.

6 Q. And would you agree with me that
7 groundrules should not contain options that if
8 implemented will result in undesirable environmental
9 effects?

10 A. Yes.

11 Q. I take it from your evidence that
12 although you don't want to limit the forester's
13 flexibility in the field, in your view there are
14 certain practices that should not be part of normal
15 operations?

16 A. Correct.

17 Q. And is it fair to say that this
18 really links back to your statement at the outset of
19 your evidence that foresters have to incorporate into
20 their prescriptions the protective aspects of forestry?

21 A. That's what is necessary, yes.

22 Q. Now, in the context of Forests for
23 Tomorrow's silvicultural prescriptions, you answered a
24 number of questions in relation to how you saw those
25 being applied, and one of the messages you left the

1 Board was that there had to be some flexibility built
2 into these prescription?

3 A. Yes, that's correct.

4 Q. And I want to just try and test that
5 a little bit in terms of -- so I can understand what
6 you mean by building the flexibility into the
7 prescriptions.

8 For example, where you recommend that
9 strips no wider than two times the tree height for
10 black spruce is the recommended prescription --

11 A. On very unstable sites, and here I
12 quantify the unstable sites; in other words, which
13 haven't got the resiliency to sustain its stability and
14 that is the primary objective of proper forest renewal.

15 Q. Okay. And on a certain site a
16 forester may go in and have a look at that site or look
17 at the information he has in his office to try and
18 determine what would be an appropriate prescription,
19 and it may be that he would in his wisdom decide that
20 that standard should be modified somewhat; is that
21 correct?

22 A. Well, if the conditions are such that
23 he is looking some of these danger of, for instance,
24 drastic changes by snow removal, by catastrophes, wind
25 throw and some of these things which happen frequently

1 in the boreal forest, then of course he has to consider
2 these conditions and modify accordingly.

3 There is no doubt about it that nature
4 frequently cross-purposes our thinking and we have to
5 adapt to it. We have to act accordingly.

6 Q. And is it fair to say then that when
7 you talk about about flexibility you are not saying
8 then that the forester would have the flexibility to go
9 to an unstable site at say: I am not going to follow
10 this particular standard, I am going to do a 10,000
11 hectare clearcut instead?

12 A. Yes, but that's a kind of extreme
13 condition.

14 Madam Chair, just to resolve this. Where
15 is the flexibility? The flexibility is based on
16 occurrences; for instance, you clearcut strips to a
17 certain width, you site prepare it, you are ready to
18 establish new stands and all of sudden blowdown occurs
19 in certain areas which requires immediate attention.
20 So the forester obviously will not force the issue and
21 start, you know, strip cutting. He just have to remove
22 the damaged timber and that, of course, he may widen
23 out the strips or he may widen up over large area. So
24 this is what I call flexibility.

25 Start with the intention to do certain

1 things and if nature all of a sudden interfere, you
2 become flexible to accommodate but still remain in
3 reality that you don't clearcut whole area, but just
4 remove, for instance, area affected.

5 MADAM CHAIR: And will flexibility only
6 be occasioned by the involvement of nature? Will
7 flexibility be occasioned by economic factors?

8 THE WITNESS: There are many occasions,
9 madam, and I think that the forester has to anticipate
10 in some of these things and try to avoid them and
11 prevent them. But if it's happened, then of course
12 you've got to use the flexibility.

13 MADAM CHAIR: But there is no economic
14 situation that you would conceive of where a large area
15 clearcut would be needed if it didn't relate to insect,
16 blowdown--

17 THE WITNESS: No

18 MADAM CHAIR: --disease?

19 THE WITNESS: No.

20 MS. SEABORN: Q. Would you agree with
21 me, Mr. Marek, that flexibility cannot be allowed to
22 extend to the setting of prescriptions that are going
23 to result in a negative environmental impact? That's
24 what we should be seeking to avoid through our
25 prescriptions?

1 A. If the prescriptions are right,
2 Madam, and if the forester is conscious of his duty, he
3 surely will not take drastic measures outside these
4 prescriptions. Your case was you do strip cutting and
5 all of a sudden something goes wrong and you have to
6 clearcut 10 square miles. That's what you are talking
7 about.

8 Q. Yes.

9 A. I'm not talking about that kind of
10 flexibility because obviously the forester should
11 anticipate some things.

12 Q. So your flexibility doesn't extend to
13 that extreme example?

14 A. No.

15 Q. But your flexibility does extend
16 somewhat beyond what is set in your silvicultural
17 prescriptions?

18 A. May I give, Madam Chair --

19 Q. To suit particular circumstances?

20 A. Right. May I give you example and I
21 think it's an excellent example of flexibility or not
22 being flexible.

23 You strip cut certain area and remove all
24 buffer zones, you just expose that whole strip cut for
25 sake of the strip cuts and do not consider the

1 protective aspect. What kind of flexibility is this?

2 Let me give other example. What kind of
3 flexibility is this, that you strip cut area with a
4 good intent and do not scarify for next three years.
5 Flexibility because you didn't have the money, you
6 didn't scarify -- because scarification is very
7 important part of renewal process and if you neglect
8 it, is that flexibility?

9 In many instances I have seen these cases
10 where companies do strip cutting -- as a matter of
11 fact, the case of yesterday which was brought up here,
12 didn't scarify this area for three years; in other
13 words, prevented natural seeding on these strips. So
14 why do we strip cut?

15 So this is kind of flexibility which I
16 was trying to promote here, indeed there is some
17 flexibility, but don't call flexibility that three
18 years after strip cutting you don't scarify these
19 strips in order to get natural regeneration because you
20 might as well clearcut it.

21 MADAM CHAIR: Are you saying, though, Mr.
22 Marek, that you wouldn't clearcut, in fact you wouldn't
23 do any harvesting at all if you knew there was a chance
24 you couldn't scarify the following season?

25 THE WITNESS: That's right. Timing,

1 timing of operation. If I cannot site prepare
2 immediately after cutting, I just don't do that
3 because it's throwing money away and this is the case
4 yesterday.

5 I didn't bring it up, but I knew it was
6 going to come sooner or later. It's written right
7 here, madam Chair. Areas site prepared three or four
8 years later. Now, why did we strip cut it? That
9 happens frequently. There was no funding perhaps, I
10 don't know, may they forgot about the area, to site
11 prepare it. I don't know what's happened there, but
12 the fact is if you didn't site prepare immediately
13 after you are wasting your time and money.

14 MS. SEABORN: Madam Chair, I see it's
15 almost four. I am not sure if I have time for even one
16 more question before four.

17 MADAM CHAIR: Ms. Swenarchuk?

18 MS. SWENARCHUK: On the subject of
19 completing the panel overall and the next panel, from
20 my discussions with Mr. Freidin and Ms. Seaborn it
21 appears that we will finish this panel some time on
22 Thursday. It might not be until late in the day, it
23 could be a little earlier, but essentially I am
24 requesting your approval that we plan to start Panel 4
25 on Monday as opposed to having to fly in the witness

1 for a possible commencement on Thursday which might or
2 might not occur.

3 ---Discussion off the record

4 MADAM CHAIR: That's Dr. Payne?

5 MS. SWENARCHUK: That's right.

6 MADAM CHAIR: Where is Dr. Payne from?

7 MS. SWENARCHUK: Thunder Bay.

8 MADAM CHAIR: Well, we will start Panel 4
9 on Monday.

10 MS. SWENARCHUK: Thank you.

11 Let's call it a day and we will back at
12 nine o'clock tomorrow morning.

13 MS. SEABORN: Wednesday, Madam Chair.

14 MADAM CHAIR: Wednesday. Thank you.

15 MS. SEABORN: Thank you.

16 MADAM CHAIR: Thank you, Mr. Marek.

17

18 ---Whereupon the hearing adjourned at 4:00 p.m., to be
19 reconvened Wednesday, November 21, 1990 commencing
20 at 9:00 a.m.

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